

=> d his

(FILE 'HOME' ENTERED AT 14:47:55 ON 18 JUL 2005)

L1 FILE 'HCAPLUS' ENTERED AT 14:48:09 ON 18 JUL 2005  
1 US20040147561/PN OR US2002-436787#/AP, PRN

FILE 'REGISTRY' ENTERED AT 14:49:14 ON 18 JUL 2005

L2 FILE 'HCAPLUS' ENTERED AT 14:49:16 ON 18 JUL 2005  
TRA L1 1- RN : 403 TERMS

L3 FILE 'REGISTRY' ENTERED AT 14:49:16 ON 18 JUL 2005  
403 SEA L2

L4 FILE 'WPIX' ENTERED AT 14:49:20 ON 18 JUL 2005  
1 US20040147561/PN OR US2002-436787#/AP, PRN

=> b hcap

FILE 'HCAPLUS' ENTERED AT 14:49:43 ON 18 JUL 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 18 Jul 2005 VOL 143 ISS 4  
FILE LAST UPDATED: 17 Jul 2005 (20050717/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all 11

L1 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:589549 HCAPLUS  
DN 141:140450  
ED Entered STN: 23 Jul 2004  
TI Preparation of 2-oxopyridin-3-yl thia(di)azoles as Cdk2 and Cdk5 kinase inhibitors for the treatment of cell proliferation-related disorders  
IN Zhong, Wenge; Norman, Mark Henry; Kaller, Matthew; Nguyen, Thomas; Rzasa, Robert Michael; Tegley, Christopher; Wang, Hui-Ling  
PA Amgen Inc., USA  
SO PCT Int. Appl., 317 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
IC ICM C07D417-14  
ICS C07D417-04; C07D471-04; C07D491-04; A61K031-4412; A61P035-00  
CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))  
Section cross-reference(s): 1, 63  
FAN.CNT 1  
PATENT NO. KIND DATE APPLICATION NO. DATE  
----- ----- ----- -----  
PI WO 2004060890 A1 20040722 WO 2003-US41388 20031222 <-

WO 2004060890 C1 20040826  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE,  
 GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,  
 LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,  
 OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
 TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 US 2004147561 A1 20040729 US 2003-736289 20031212 <--  
 PRAI US 2002-436787P P 20021227 <--  
 US 2003-736289 A 20031212

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004060890	ICM	C07D417-14
	ICS	C07D417-04; C07D471-04; C07D491-04; A61K031-4412; A61P035-00
WO 2004060890	ECLA	C07D417/04+277B+213; C07D417/14+277B+213+213; C07D417/14+277B+277B+213; C07D417/14+307B+277B+213; C07D417/14+317+277B+213; C07D417/14+333B+277B+213; C07D417/14R+277B+213; C07D417/14R+277B+213+207; C07D417/14R+277B+213+211; C07D417/14R+277B+263B+213; C07D417/14R+277B+275+213; C07D417/14R+307B+277B+213; C07D417/14R+333B+277B+213; C07D471/04+221B+221B; C07D471/04+221B+221B+2; C07D491/04+311B+221B <--
US 2004147561	NCL	514/340.000; 514/345.000; 546/268.100; 546/300.000
	ECLA	C07D417/04+277B+213; C07D417/14+277B+213+213; C07D417/14+277B+277B+213; C07D417/14+307B+277B+213; C07D417/14+317+277B+213; C07D417/14+333B+277B+213; C07D417/14R+277B+213; C07D417/14R+277B+213+207; C07D417/14R+277B+213+211; C07D417/14R+277B+263B+213; C07D417/14R+307B+277B+213; C07D471/04+221B+221B+2; C07D491/04+311B+221B <--

OS MARPAT 141:140450  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [wherein A = O or S; Q = NH<sub>2</sub> and derivs., NHC(=O)H, alkyl-OH and derivs., (un)substituted monocyclic or bicyclic, etc; W = (un)substituted 1,3-thiazolyl, 1,2,4-thiadiazolyl; R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> = independently H, halo, aryl, alk(en/yn)yl, perfluoroalkyl, NO<sub>2</sub>, heterocyclyl, NH<sub>2</sub> and derivs., etc.; R<sub>1</sub>CCR<sub>2</sub> or R<sub>2</sub>CCR<sub>3</sub> = 5-10 membered (un)saturated carbocyclic or heterocyclic and derivs.; with provisos; and pharmaceutically acceptable salts thereof] are disclosed as serine/threonine kinase inhibitors for effective treatment of cell proliferation or apoptosis-mediated diseases (no data). The invention encompasses I and pharmaceutically acceptable derivs. thereof, pharmaceutical compns., and methods for prophylaxis and treatment of diseases and other maladies or conditions involving stroke, cancer, and the like (no data). For example, II was prepared by cyclization of bromoacetylpyridinone (III) (preparation given) with 2-(2-thienylsulfonyl)ethanethioamide in EtOH under microwave conditions at 150° for 5 min. II exhibited Cdk2/cyclin and Cdk5/p25 kinase activity with IC<sub>50</sub> values < 0.5 μM and inhibited cell proliferation of human PC-3 prostate cells, HCT 116 human colon carcinoma cells, or HT 29 human colon carcinoma cells with IC<sub>50</sub> < 1 μM.  
 ST thiadiazole prepn cyclin dependent kinase inhibitor antiproliferative apoptosis; anticancer stroke treatment oxopyridine thiazole prepn Cdk2 Cdk5 inhibitor

IT Intestine, neoplasm  
     (colon, treatment; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT Cell proliferation  
     (inhibition; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT Antitumor agents  
     Apoptosis  
     Human  
     Nervous system agents  
         (preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT Brain, disease  
     (stroke, treatment; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT Neoplasm  
     Nervous system, disease  
     Prostate gland, neoplasm  
         (treatment; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT 727383-80-4P, 2-Methyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid trifluoroacetate  
     RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
         (Cdk2/Cdk5 inhibitor; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT 727382-46-9P, Ethyl 2-ethyl-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydropyridine 3-carboxylate 727382-58-3P, Ethyl 2-isopropyl-6-oxo-5-[2-(4-pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-61-8P, Ethyl 2-isopropyl-6-oxo-5-[2-[(phenylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-78-7P, 727383-04-2P, Ethyl 5-[2-(2-chloro-4-pyridinyl)-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-27-9P, Ethyl 5-[2-[2-(4-Methoxybenzylamino)pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-30-4P, Ethyl 2-methyl-5-[2-(methylamino)-1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-52-0P, 2-(Isopropyl)-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylic acid 727383-77-9P, 1,1-Dimethylethyl 2-methyl-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-89-3P, 5-Hydroxymethyl-6-methyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-52-3P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid (2-hydroxyethyl)amide 727384-54-5P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid (2-hydroxypropyl)amide 727384-61-4P, 2-(2-Benzylxyethyl)-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid ethyl ester 727384-65-8P, 2-(2-Hydroxyethyl)-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid ethyl ester  
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
         (Cdk2/Cdk5 inhibitor; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT 727382-48-1P 727382-49-2P, Ethyl 2-ethyl-6-oxo-5-[2-[(phenylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-50-5P, Ethyl 2-ethyl-6-oxo-5-[2-(benzodioxol-5-yl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-51-6P, Ethyl 6-oxo-5-[2-[(phenylsulfonyl)methyl]-1,3-thiazol-4-yl]-2-(trifluoromethyl)-1,6-dihydro-3-pyridinecarboxylate 727382-53-8P, Ethyl 2-trifluoromethyl-6-oxo-5-[2-(3-chloro-4-pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-55-0P, Ethyl 6-oxo-5-[2-[(2-pyridylsulfonyl)methyl]-1,3-thiazol-4-yl]-2-(trifluoromethyl)-1,6-dihydro-3-pyridinecarboxylate 727382-56-1P, Ethyl 6-oxo-5-[2-[(2-

thienylsulfonyl)methyl]-1,3-thiazol-4-yl]-2-(trifluoromethyl)-1,6-dihydro-3-pyridinecarboxylate 727382-57-2P, Ethyl 2-trifluoromethyl-6-oxo-5-[2-(4-pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
727382-60-7P, Ethyl 2-isopropyl-6-oxo-5-[2-[(2-thienylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-62-9P, Ethyl 2-propyl-6-oxo-5-[2-(4-pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-65-2P, Ethyl 2-propyl-6-oxo-5-[2-[(phenylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-66-3P, Ethyl 2-propyl-6-oxo-5-[2-[(2-thienylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-67-4P, Ethyl 6-oxo-2-[(phenylmethoxy)methyl]-5-[2-(4-pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
727382-71-0P, Ethyl 6-oxo-2-[(phenylmethoxy)methyl]-5-[2-[(phenylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-72-1P 727382-74-3P, 3-[2-(Pyridin-4-yl)-1,3-thiazol-4-yl]-1,7,8-trihydro-5H-pyrano[4,3-b]pyridin-2-one 727382-76-5P  
727382-79-8P, 3-[2-(Pyridin-4-yl)-1,3-thiazol-4-yl]-1,5,6,7,8-pentahydropyridino[3,2-c]pyridin-2-one dihydrochloride 727382-80-1P, Ethyl 2-[(4-methoxyphenyl)methoxy]methyl]-6-oxo-5-[2-(4-pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-85-6P, Ethyl 2-methyl-6-oxo-5-[2-[(2-thienylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-87-8P, Ethyl 5-[2-[(4-chlorophenyl)sulfonyl)methyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727382-89-0P, Ethyl 5-[2-[(4-fluorophenyl)methyl]sulfonyl)methyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727382-90-3P, Ethyl 2-methyl-6-oxo-5-[2-(2-thienyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
727382-92-5P, Ethyl 2-methyl-6-oxo-5-[2-(phenylthiomethyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-93-6P, Ethyl 5-[2-(2-ethyl-4-pyridinyl)-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727382-94-7P, Ethyl 2-methyl-6-oxo-5-[2-[(3-(trifluoromethyl)phenyl)methyl]sulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-95-8P, Ethyl 2-methyl-6-oxo-5-[2-(3-thienyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
727382-96-9P, Ethyl 5-[2-(2H-benz[d]-1,3-dioxolan-5-yl)-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727382-97-0P, Ethyl 2-methyl-6-oxo-5-(2-phenyl-1,3-thiazol-4-yl)-1,6-dihydro-3-pyridinecarboxylate 727382-98-1P, Ethyl 2-methyl-6-oxo-5-[2-(4-fluorophenyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
727382-99-2P, Ethyl 5-[2-(2,6-dichlorophenyl)-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-00-8P, Ethyl 2-methyl-5-[2-(2-methyl-1,3-thiazol-4-yl)-1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-01-9P, Ethyl 5-[2-[(furan-2-ylmethyl)sulfonyl)methyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-02-0P, Ethyl 5-[2-[(tert-butyl)sulfonyl)methyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-03-1P, Ethyl 2-methyl-6-oxo-5-[2-(3-pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-06-4P, Ethyl 2-methyl-6-oxo-5-[2-(4-methoxyphenyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-07-5P, Ethyl 5-[2-(3,5-dichloropyridin-4-yl)thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate  
727383-08-6P, Ethyl 5-[2-[(methylsulfonyl)methyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-09-7P, Ethyl 5-[2-[(4-chlorophenyl)sulfonyl)methyl]-2-thienyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-10-0P, Ethyl 2-methyl-6-oxo-5-[2-[2-(1-piperidinyl)-4-pyridinyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-11-1P, Ethyl 2-methyl-5-[2-[2-(2-methylpropyl)amino]-4-pyridinyl]-1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-12-2P, Ethyl 2-methyl-6-oxo-5-[2-[(3-pyridinylmethyl)amino]-4-pyridinyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-13-3P, Ethyl 2-methyl-6-oxo-5-[2-[(phenylmethyl)amino]-4-pyridinyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-14-4P, Ethyl 2-methyl-6-oxo-5-[2-[2-[2-oxo-3-(trifluoromethyl)-1(2H)-pyridinyl]ethyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-15-5P, Ethyl 5-[2-[2-[(2-diethylamino)ethyl]amino]-4-pyridinyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-

1,6-dihydro-3-pyridinecarboxylate 727383-16-6P, Ethyl  
 5-[2-[2-[(fur-2-ylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-  
 1,6-dihydro-3-pyridinecarboxylate hydrochloride 727383-17-7P, Ethyl  
 5-[2-[2-[[2-(thien-2-yl)ethyl]amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-  
 oxo-1,6-dihydro-3-pyridinecarboxylate hydrochloride 727383-18-8P, Ethyl  
 5-[2-[2-(4-fluorobenzylamino)pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-  
 dihydro-3-pyridinecarboxylate hydrochloride 727383-19-9P, Ethyl  
 5-[2-(2-butylaminopyridin-4-yl)thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-  
 pyridinecarboxylate hydrochloride 727383-20-2P, Ethyl  
 5-[2-[2-[(carbamoylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-  
 1,6-dihydro-3-pyridinecarboxylate hydrochloride 727383-21-3P, Ethyl  
 5-[2-[2-[(acetylaminio)ethylamino]pyridin-4-yl]-1,3-thiazol-4-yl]-2-  
 methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate hydrochloride  
 727383-22-4P, N-[2-[4-[4-(6-Methyl-2-oxo-1,2-dihydropyridin-3-yl)-1,3-  
 thiazol-2-yl]pyridin-2-yl]amino]ethyl]acetamide 727383-23-5P,  
 N-(Cyclopropylmethyl)-5-[2-[2-[(cyclopropylmethyl)amino]-4-pyridinyl]-1,3-  
 thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxamide  
 hydrochloride 727383-24-6P, Ethyl 5-[2-[2-[(cyclopropylmethyl)amino]pyri-  
 din-4-yl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-  
 pyridinecarboxylate hydrochloride 727383-25-7P, Ethyl  
 5-[2-[2-[(Cyclopentylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-  
 oxo-1,6-dihydro-3-pyridinecarboxylate hydrochloride 727383-26-8P,  
 5-[2-[2-[(4-Methoxybenzyl)amino]pyridin-4-yl]-1,3-thiazol-4-yl]-2-methyl-6-  
 oxo-1,6-dihydropyridine-3-carboxylic acid N-(4-methoxybenzyl)amide  
 hydrochloride 727383-28-0P, Ethyl 2-methyl-6-oxo-5-[2-[2-(amino)-4-  
 pyridinyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
 727383-29-1P 727383-31-5P, Ethyl 2-methyl-5-[2-  
 [methyl(phenylsulfonyl)amino]-1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-  
 pyridinecarboxylate 727383-32-6P 727383-33-7P, Ethyl  
 2-methyl-5-[2-[methyl(phenylsulfonyl)amino]-1,3-thiazol-4-yl]-6-oxo-1,6-  
 dihydro-3-pyridinecarboxylate hydrochloride (1/2) 727383-34-8P,  
 5-[(Phenylmethyl)oxy]-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-2(1H)-  
 pyridinone 727383-35-9P, 6-(Methoxymethyl)-3-[2-(4-pyridinyl)-1,3-  
 thiazol-4-yl]-2(1H)-pyridinone 727383-37-1P, 5-Phenoxy-3-[2-(4-  
 pyridinyl)-1,3-thiazol-4-yl]-2(1H)-pyridinone 727383-38-2P,  
 5-Phenoxy-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-2(1H)-pyridinone  
 hydrochloride (1/3) 727383-39-3P, 6-Methyl-3-[2-(4-pyridyl)-1,3-thiazol-  
 4-yl]-1H-pyridin-2-one 727383-40-6P, Ethyl 2-(1-methylethyl)-5-[2-(2-  
 methoxy-4-pyridinyl)-1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-  
 pyridinecarboxylate 727383-42-8P, Ethyl 2-methyl-5-[2-[2-(methoxy)-4-  
 pyridinyl]-1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-pyridinecarboxylate  
 727383-43-9P, Ethyl 2-methyl-6-oxo-5-[2-[(phenylsulfonyl)methyl]-1,3-  
 thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-44-0P, Ethyl  
 2-methyl-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-  
 pyridinecarboxylate 727383-45-1P, Ethyl 2-methyl-6-oxo-5-[2-[(2-  
 pyridylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-  
 pyridinecarboxylate 727383-46-2P, Ethyl 2-methyl-5-[2-[1-methyl-1-  
 (phenylsulfonyl)ethyl]-1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-  
 pyridinecarboxylate 727383-47-3P, Ethyl 2-cyclopropyl-6-oxo-5-[2-(4-  
 pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
 727383-51-9P, Ethyl 2-cyclopropyl-6-oxo-5-[2-[(phenylsulfonyl)methyl]-1,3-  
 thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-53-1P,  
 5-Bromo-6-methyl-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-2(1H)-pyridinone  
 727383-56-4P, Ethyl 2-methyl-5-[2-[2-(methylamino)-4-pyridinyl]-1,3-  
 thiazol-4-yl]-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-58-6P,  
 5-Amino-6-ethyl-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-2(1H)-pyridinone  
 727383-65-5P, N-[2-Ethyl-6-oxo-5-[2-(4-pyridyl)-1,3-thiazol-4-yl]-1,6-  
 dihydropyridin-3-yl]acetamide 727383-66-6P, 4-Dimethylamino-6-methyl-3-  
 [2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727383-68-8P,  
 6-Methyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-5,6,7,8-tetrahydro-1H-  
 [1,6]naphthyridin-2-one 727383-69-9P, 2-Methyl-6-oxo-N-(2-  
 pyridinylmethyl)-5-[2-[2-[(2-pyridinyl)methyl]amino]-4-pyridinyl]-1,3-  
 thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxamide 727383-70-2P,  
 6-Methyl-3-[2-[2-[(2-pyridinyl)methyl]amino]-4-pyridinyl]-1,3-thiazol-4-yl]-  
 2(1H)-pyridinone 727383-71-3P, Ethyl 2-methyl-6-oxo-5-[2-[2-[(2-  
 pyridinyl)methyl]amino]-4-pyridinyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-

pyridinecarboxylate 727383-72-4P, Ethyl 2-methyl-6-oxo-5-[2-[2-[(2-(phenyloxy)ethyl)amino]-4-pyridinyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-73-5P, 5-[2-[2-(Ethoxy)-4-pyridinyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydriopyridine-3-carboxylic acid 727383-75-7P, Ethyl 5-[2-(2-dimethylaminopyridin-4-yl)-1,3-thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-76-8P, Ethyl 5-[2-(2-methylaminopyridin-4-yl)-1,3-thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate hydrochloride 727383-79-1P, 2-Methyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 727383-81-5P, 6-Methyl-5-[(4-methyl-1-piperazinyl)carbonyl]-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-2(1H)-pyridinone 727383-82-6P, 2-(Pyrrolidin-1-yl)ethyl 2-methyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylate 727383-84-8P, 2-(Pyrrolidin-1-yl)ethyl 2-ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylate 727383-85-9P, 6-Ethyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727383-86-0P, 6-Isopropyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727383-87-1P, 3-(Diethylamino)propyl 2-ethyl-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydriopyridinecarboxylate 727383-88-2P, 3-(Diethylamino)propyl 2-(1-methylethyl)-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydriopyridinecarboxylate 727383-91-7P, 5-[(3,6-Dihydro-2H-pyridin-1-yl)methyl]-6-methyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727383-94-0P, 6-Ethyl-5-[(piperidin-1-yl)methyl]-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one hydrochloride 727383-96-2P, 6-Ethyl-5-(4-methylpiperazin-1-ylmethyl)-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one hydrochloride 727383-97-3P, 6-Methyl-3-[4-(pyridin-4-yl)thiazol-2-yl]-1H-pyridin-2-one 727383-98-4P, 6-Ethyl-5-isobutylamino-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-01-2P, N-[2-Ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridin-3-yl]isobutyramide 727384-03-4P, 6-Isopropyl-5-methyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-06-7P, 3-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-6-isopropyl-5-methyl-1H-pyridin-2-one 727384-08-9P, 6-Ethyl-5-propionyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-10-3P, 3-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-6-ethyl-5-propionyl-1H-pyridin-2-one 727384-11-4P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 2-dimethylaminoethyl ester 727384-13-6P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 2-(pyrrolidin-1-yl)ethyl ester 727384-14-7P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 2-(2-oxopyrrolidin-1-yl)ethyl ester 727384-15-8P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 2-diisopropylaminoethyl ester 727384-16-9P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 2-diethylaminoethyl ester 727384-17-0P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 1-methylpyrrolidin-3-yl ester 727384-18-1P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 1-ethylpyrrolidin-3-yl ester 727384-19-2P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 1-ethylpiperidin-3-yl ester 727384-20-5P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid piperidin-4-ylmethyl ester 727384-22-7P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 2-(1-methylpyrrolidin-2-yl)ethyl ester 727384-23-8P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 1-methylpiperidin-3-yl ester 727384-24-9P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 2-dimethylamino-1-methylethyl ester 727384-25-0P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 2-diethylamino-1-methylethyl ester 727384-26-1P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 2-[(benzyl)(methyl)amino]ethyl ester 727384-27-2P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydriopyridine-3-carboxylic acid 1-methylpiperidin-4-yl ester

727384-28-3P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-(piperazin-1-yl)ethyl ester  
727384-29-4P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-(2-oxopyrrolidin-1-yl)propyl ester  
727384-30-7P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid phenethyl ester 727384-32-9P,  
2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-(thiophen-2-yl)ethyl ester  
727384-33-0P, 5-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid 2-diethylaminoethyl ester  
727384-36-3P, 5-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid 2-diethylamino-1-methylethyl ester  
727384-37-4P, 5-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid 2-diethylaminopropyl ester  
727384-38-5P, 5-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid 2-(1-methylpyrrolidin-2-yl)ethyl ester  
727384-39-6P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-(morpholin-4-yl)ethyl ester  
727384-40-9P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-(piperidin-1-yl)ethyl ester  
727384-41-0P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid methyl ester 727384-42-1P,  
2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid methyl ester trifluoroacetate  
727384-43-2P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid propyl ester 727384-44-3P,  
2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid propyl ester trifluoroacetate  
727384-45-4P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid butyl ester 727384-46-5P,  
2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid butyl ester trifluoroacetate  
727384-47-6P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid isobutyl ester 727384-48-7P,  
2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid isobutyl ester trifluoroacetate  
727384-49-8P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid sec-butyl ester 727384-50-1P,  
2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid sec-butyl ester trifluoroacetate  
727384-55-6P, 5-(4,5-Dihydrooxazol-2-yl)-6-isopropyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-56-7P, 6-Isopropyl-5-(5-methyl-4,5-dihydrooxazol-2-yl)-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-57-8P, 5-[(2-Dimethylaminoethyl)(ethyl)amino]methyl-6-ethyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-59-0P,  
5-[(2-Diethylaminoethyl)(methyl)amino]methyl-6-ethyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-66-9P, 6-Oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-2-[2-(pyrrolidin-1-yl)ethyl]-1,6-dihdropyridine-3-carboxylic acid ethyl ester 727384-68-1P, 2-Isopropyl-N-(4-methoxybenzyl)-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxamide 727384-69-2P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid amide  
727384-70-5P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid isobutylamide 727384-72-7P,  
2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid methylamide 727384-73-8P,  
2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid (2-isopropylaminoethyl)amide 727384-74-9P,  
2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid dimethylamide 727384-75-0P,  
2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid N-(pyridin-4-ylmethyl)amide 727384-76-1P,  
2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid N-(pyridin-2-ylmethyl)amide 727384-78-3P,  
5-(Furan-2-yl)-6-isopropyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-83-0P, N-[2-Ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-

thiazol-4-yl]-1,6-dihdropyridin-3-yl]-2-methylaminoacetamide  
 727384-84-1P, 2-Dimethylamino-N-[2-ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridin-3-yl]acetamide 727384-85-2P,  
 N-[2-Ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridin-3-yl]-3-(piperidin-1-yl)propionamide 727384-86-3P, N-[2-Ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridin-3-yl]-3-methylbutyramide 727384-87-4P, 2-Amino-N-[2-ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridin-3-yl]acetamide 727384-88-5P,  
 2-tert-Butylamino-N-[2-ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridin-3-yl]acetamide 727384-89-6P, (S)-2-Amino-N-[2-ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridin-3-yl]-3-methylbutyramide 727384-90-9P, N-[2-Ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridin-3-yl]-2-(piperidin-1-yl)acetamide 727384-92-1P  
 N-[2-Ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridin-3-yl]-4-(piperidin-1-yl)butyramide 727384-93-2P, 5-(1,1-Dioxidoisothiazolidin-2-yl)-6-ethyl-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-2(1H)-pyridinone 727384-94-3P, 6-Ethyl-5-(3-methylbutylamino)-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-95-4P, Ethyl 5-[2-[2-[(fur-2-ylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylate 727384-96-5P, Ethyl 5-[2-[2-[(2-(thien-2-yl)ethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylate 727384-97-6P, Ethyl 5-[2-(2-butylaminopyridin-4-yl)thiazol-4-yl]-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylate 727384-98-7P, Ethyl 5-[2-[(carbamoylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylate 727384-99-8P, Ethyl 5-[2-(2-acetylaminooethylamino)pyridin-4-yl-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylate 727385-00-4P, 5-[2-[(Cyclopropylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid N-(cyclopropylmethyl)amide 727385-02-6P, Ethyl 5-[2-[2-[(cyclopropylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylate 727385-03-7P, Ethyl 5-[2-[(Cyclopentylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylate 727385-04-8P, 5-[2-[2-(4-Methoxybenzylamino)pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid 4-methoxybenzylamide 727385-05-9P, 6-Methyl-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]hydropyridin-2-one 727385-06-0P, Ethyl 5-[2-(2-methylaminopyridin-4-yl)thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihdropyridine-3-carboxylate 727385-07-1P, Ethyl 2-methyl-5-[2-[2-[(1-methylethyl)amino]ethyl]amino]-4-pyridinyl]-1,3-thiazol-4-yl]-6-oxo-1,6-dihdropyridine-3-carboxylate 727385-08-2P, Ethyl 2-isopropyl-6-oxo-5-[2-(4-pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate hydrobromide (3/5)  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Cdk2/Cdk5 inhibitor; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT 141349-86-2

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (Cdk2/cyclin; inhibition; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT 147014-96-8

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (inhibition; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT 19335-57-0P 24922-02-9P 25957-23-7P, 5-Acetyl-2-methyl-6-oxo-1,6-dihdropyridine 31112-96-6P, 2-[2-(Pyridin-4-yl)thiazol-4-yl]acetamide 36674-49-4P, 2-Benzene sulfonyl-2-methylpropionitrile 51145-57-4P, Ethyl 2-acetyl-3-(dimethylamino)prop-2-enoate 51719-12-1P, N-(4-Methoxybenzyl)acetoacetamide 55985-43-8P, 3-Oxobutanoic acid 2-(pyrrolidin-1-yl)ethyl ester 59503-67-2P, Ethyl 5-acetyl-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylate 67354-34-1P, Ethyl 3-oxo-4-(phenylmethoxy)butanoate 88301-99-9P, 4-

[(Dimethylamino)methylene]heptane-3,5-dione 89193-23-7P, Ethyl  
 2-propionyl-3-(dimethylamino)prop-2-enoate 93552-74-0P,  
 2-[(Dimethylamino)methylene]-3-oxobutanoic acid tert-butyl ester  
 116344-09-3P, Ethyl 3-(dimethylamino)-2-(2-methylpropanoyl)prop-2-enoate  
 154020-52-7P, Ethyl 5-acetyl-2-ethyl-6-oxo-1,6-dihydropyridine-3-  
 carboxylate 154020-53-8P, Ethyl 5-acetyl-2-isopropyl-6-oxo-1,6-  
 dihydropyridine-3-carboxylate 154020-54-9P, Ethyl 5-acetyl-2-  
 trifluoromethyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 247169-71-7P,  
 3-Acetyl-6-ethyl-5-propionyl-1H-pyridin-2-one 267243-86-7P, Ethyl  
 2-trifluoroacetyl-3-(dimethylamino)prop-2-enoate 475115-38-9P,  
 5-Acetyl-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylic acid tert-butyl  
 ester 475115-40-3P, Ethyl 5-acetyl-2-propyl-6-oxo-1,6-dihydropyridine-3-  
 carboxylate 578020-10-7P, 2-Amino-1,1-dimethyl-1-(phenylsulfonyl)ethane-  
 2-thione 632365-67-4P, 1-Dimethylamino-2,4-dimethylpent-1-en-3-one  
 727382-47-0P, Ethyl 5-(2-bromoacetyl)-2-ethyl-6-oxo-1,6-dihydropyridine-3-  
 carboxylate 727382-52-7P, Ethyl 5-(2-bromoacetyl)-2-trifluoromethyl-6-  
 oxo-1,6-dihydro-3-pyridinecarboxylate 727382-59-4P, Ethyl  
 5-(2-bromoacetyl)-2-isopropyl-6-oxo-1,6-dihydropyridine-3-carboxylate  
 727382-63-0P, Ethyl 2-propyl-3-(dimethylamino)prop-2-enoate  
 727382-64-1P, Ethyl 5-(2-bromoacetyl)-2-propyl-6-oxo-1,6-dihydropyridine-3-  
 carboxylate 727382-68-5P 727382-69-6P, Ethyl 5-acetyl-6-oxo-2-[  
 (phenylmethoxy)methyl]-1,6-dihydropyridine-3-carboxylate 727382-70-9P,  
 Ethyl 5-(2-bromoacetyl)-6-oxo-2-[  
 (phenylmethoxy)methyl]-1,6-  
 dihydropyridine-3-carboxylate 727382-73-2P 727382-75-4P,  
 3-[(Dimethylamino)methylene]-2H-5,6-dihydropyran-4-one 727382-77-6P  
 727382-81-2P, Ethyl 4-[(4-methoxyphenyl)methoxy]-3-oxobutanoate  
 727382-82-3P, Ethyl 3-(dimethylamino)-2-[2-[(4-  
 methoxyphenyl)methoxy]acetyl]prop-2-enoate 727382-83-4P, Ethyl  
 5-acetyl-2-[(4-methoxyphenyl)methoxy]methyl]-6-oxo-1,6-dihydropyridine-3-  
 carboxylate 727382-84-5P, Ethyl 5-(2-bromoacetyl)-2-[  
 [(4-  
 methoxyphenyl)methoxy]methyl]-6-oxo-1,6-dihydropyridine-3-carboxylate  
 727382-86-7P, 5-(2-Bromoacetyl)-2-methyl-6-oxo-1,6-dihydropyridine-3-  
 carboxylic acid ethyl ester 727383-41-7P, 2-Methoxythioisonicotinamide  
 727383-48-4P, 2-(Cyclopropylcarbonyl)-3-dimethylaminoacrylic acid ethyl  
 ester 727383-49-5P, Ethyl 5-acetyl-2-cyclopropyl-6-oxo-1,6-  
 dihydropyridine-3-carboxylate 727383-50-8P, Ethyl 5-(2-bromoacetyl)-2-  
 cyclopropyl-6-oxo-1,6-dihydropyridine-3-carboxylate 727383-54-2P,  
 5-Acetyl-3-bromo-2-methyl-6-oxo-1,6-dihydropyridine 727383-59-7P, Ethyl  
 5-acetyl-2-ethyl-1-(4-methoxybenzyl)-6-oxo-1,6-dihydropyridine-3-  
 carboxylate 727383-60-0P, Ethyl 5-(2-bromoacetyl)-2-ethyl-1-(4-  
 methoxybenzyl)-6-oxo-1,6-dihydropyridine-3-carboxylate 727383-61-1P,  
 Ethyl 2-ethyl-1-(4-methoxybenzyl)-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-  
 yl]-1,6-dihydro-3-pyridinecarboxylate 727383-62-2P, 2-Ethyl-1-(4-  
 methoxybenzyl)-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-  
 pyridinecarboxylic acid 727383-63-3P, [2-Ethyl-1-(4-methoxybenzyl)-6-oxo-  
 5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydropyridin-3-yl] carbamic acid  
 tert-butyl ester 727383-64-4P, 5-Amino-6-ethyl-1-(4-methoxybenzyl)-3-[2-  
 (4-pyridyl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727383-83-7P,  
 2-[(Dimethylamino)methylene]-3-Oxobutanoic acid 2-(pyrrolidin-1-yl)ethyl  
 ester 727383-90-6P, 5-[(Imidazol-1-yl)carbonyl]-6-methyl-3-[2-(pyridin-4-  
 yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727383-92-8P,  
 6-Ethyl-5-hydroxymethyl-1-(4-methoxybenzyl)-3-[2-(pyridin-4-yl)-1,3-  
 thiazol-4-yl]-1H-pyridin-2-one 727383-93-9P, 6-Ethyl-1-(4-methoxybenzyl)-  
 5-[(piperidin-1-yl)methyl]-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-  
 pyridin-2-one 727383-95-1P, 6-Ethyl-1-(4-methoxybenzyl)-5-[  
 (4-  
 methylpiperazin-1-yl)methyl]-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-  
 pyridin-2-one 727384-00-1P, 6-Ethyl-5-isobutylamino-1-(4-methoxybenzyl)-  
 3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-02-3P,  
 N-[2-Ethyl-1-(4-methoxybenzyl)-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-  
 1,6-dihydro-pyridin-3-yl]isobutyramide 727384-05-6P,  
 3-Acetyl-6-isopropyl-5-methyl-1H-pyridin-2-one 727384-09-0P,  
 3-(2-Bromoacetyl)-6-ethyl-5-propionyl-1H-pyridin-2-one 727384-12-5P,  
 5-[(Imidazol-1-yl)carbonyl]-6-isopropyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-  
 yl]-1H-pyridin-2-one 727384-21-6P 727384-34-1P, 5-[2-  
 (Benzenesulfonylmethyl)thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihydro-3-  
 pyridinecarboxylic acid 727384-35-2P, 3-[2-(Benzenesulfonylmethyl)thiazo

1-4-yl]-5-[(imidazol-1-yl)carbonyl]-6-isopropyl-1H-pyridin-2-one  
 727384-58-9P, 5-[[2-Dimethylaminoethyl](ethyl)amino]methyl]-6-ethyl-1-(4-methoxybenzyl)-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one  
 727384-60-3P, 5-[[2-Diethylaminoethyl](methyl)amino]methyl]-6-ethyl-1-(4-methoxybenzyl)-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one  
 727384-62-5P, 5-Benzyl-2-[(dimethylamino)methylene]-3-oxopentanoic acid ethyl ester 727384-63-6P, 5-Acetyl-2-(2-benzylxyethyl)-6-oxo-1,6-dihydropyridine-3-carboxylic acid ethyl ester 727384-79-4P,  
 3-Acetyl-5-bromo-6-isopropyl-1H-pyridin-2-one 727384-81-8P,  
 3-Acetyl-5-(furan-2-yl)-6-isopropyl-1H-pyridin-2-one 727384-82-9P,  
 3-(2-Bromoacetyl)-5-(furan-2-yl)-6-isopropyl-1H-pyridin-2-one  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT 60-12-8, 2-Phenylethanol 78-77-3, Isobutyl bromide 78-81-9,  
 Isobutylamine 78-96-6, 2-Hydroxypropylamine 79-30-1, Isobutyryl chloride 96-32-2, Methyl bromoacetate 96-80-0, 2-Diisopropylaminoethanol 98-09-9, Benzenesulfonyl chloride 100-37-8,  
 2-Diethylaminoethanol 104-79-0, N,N-Diethyl-N'-methyllethane-1,2-diamine 105-13-5, 4-Methoxybenzyl alcohol 106-52-5, 1-Methylpiperidin-4-ol 108-01-0, 2-Dimethylaminoethanol 108-16-7, 1-Dimethylaminopropan-2-ol 109-01-3, 1-Methylpiperazine 110-86-1, Pyridine, reactions 110-89-4, Piperidine, reactions 123-75-1, Pyrrolidine, reactions 123-83-1, N'-Ethyl-N,N-dimethyllethane-1,2-diamine 140-75-0, 4-Fluorobenzylamine 141-97-9, Ethyl acetoacetate 372-31-6, Ethyl 4,4,4-trifluoroacetoacetate 503-74-2, 3-Methylbutyric acid 530-62-1 536-33-4 565-69-5, 2-Methylpentan-3-one 609-15-4, Ethyl 2-chloroacetoacetate 617-89-0, [(Furan-2-yl)methyl]amine 622-40-2, 2-(Morpholin-4-yl)ethanol 622-93-5, 3-Diethylaminopropan-1-ol 765-43-5, Cyclopropyl methyl ketone 1001-53-2, N-(2-Aminoethyl)acetamide 1118-68-9, Dimethylaminoacetic acid 1190-91-6, 4-(Dimethylamino)but-3-en-2-one 1445-73-4, 1-Methyl-4-piperidone 1633-82-5, 3-Chloropropane-1-sulfonyl chloride 1758-46-9, 2-Phenoxyethylamine 1918-13-4, 2,6-Dichlorothiobenzamide 2196-13-6, Isothionicotinamide 2227-79-4, Thiobenzamide 2393-23-9, 4-Methoxybenzylamine 2516-47-4, (Cyclopropylmethyl)amine 2802-08-6, trans-4-(Dimethylamino)-3-butene-2-one 2955-88-6, 1-(2-Hydroxyethyl)pyrrolidine 3040-44-6, 2-(Piperidin-1-yl)ethanol 3235-67-4, Piperidin-1-ylacetic acid 3249-68-1, Ethyl butyrylacetate 3445-11-2, 2-(2-Oxopyrrolidin-1-yl)ethanol 3554-74-3, 1-Methylpiperidin-3-ol 3731-51-9, 2-Aminomethylpyridine 3731-52-0, (3-Pyridylmethyl)amine 3731-53-1, (Pyridin-4-ylmethyl)amine 4241-27-4, 3-Cyano-6-methyl-2(1H)-pyridinone 4402-32-8, 1-Diethylaminopropan-2-ol 4637-24-5 4672-16-6, 4-(Piperidin-1-yl)butyric acid 4949-44-4, Ethyl propionylacetate 5349-17-7, 4-(Bromoacetyl)pyridine hydrobromide 5402-55-1, 2-(Thiophen-2-yl)ethanol 5977-14-0, Acetoacetamide 6053-81-2, (Cyclopentylmethyl)amine 7152-15-0, Ethyl isobutyrylacetate 7424-54-6, Heptane-3,5-dione 7605-28-9, 2-(Phenylsulfonyl)acetonitrile 13220-33-2, 1-Methylpyrrolidin-3-ol 13331-23-2, (2-Furanyl)boronic acid 13444-24-1, 1-Ethylpiperidin-3-ol 13734-36-6, [(tert-Butoxycarbonyl)methyl]amino]acetic acid 13734-41-3 15884-65-8, Benzodioxole-5-carbothioic acid amide 19099-93-5, Benzyl 4-oxo-1-piperidinecarboxylate 19522-67-9, 2-Isopropylaminoethylamine 22179-72-2, 4-Fluorothiobenzamide 24044-76-6, 3-Thiophenecarbothioamide 26371-07-3, 3-(Piperidin-1-yl)propionic acid 29943-42-8, Tetrahydro-4H-pyran-4-one 30433-91-1, [2-(Thiophen-2-yl)ethyl]amine 30727-14-1, 1-Ethylpyrrolidin-3-ol 32807-28-6, Methyl 4-chloroacetoacetate 33252-30-1, 2-Chloro-4-cyanopyridine 41361-28-8, 1-Ethyl-3-piperidone hydrochloride 51451-44-6, 2-(3-Pyridinyl)thioacetamide 51731-17-0, trans-4-Methoxy-3-buten-2-one 53300-47-3, 2-Methylsulfonylthioacetamide 54334-57-5, 2-(Phenylsulfonyl)ethanethioamide 58482-93-2 59865-82-6, 2-Phenylsulfanylthioacetamide 59865-87-1, 2-(4-Chlorobenzenesulfonyl)thioacetamide 60759-02-6, 4-Methoxyphenylthioacetamide 62012-15-1, 3-(2-Oxopyrrolidin-1-yl)propanol 64714-79-0, 5-Benzyl-2-[(dimethylamino)methylene]-3-oxopentanoic acid ethyl ester 66521-58-2

67004-64-2, 2-(1-Methylpyrrolidin-2-yl)ethanol 72716-86-0,  
 2-Methoxy-4-isonicotinonitrile 74093-60-0, 3-(Dimethylamino)-2-phenoxyprop-2-enal 77279-24-4, 4-(2-Hydroxyethyl)piperazine-1-carboxylic acid tert-butyl ester 79099-07-3, tert-Butyl 4-oxo-1-piperidinecarboxylate 80882-52-6, 2-Dimethylamino-4-isonicotinonitrile 91447-89-1, 2-Chloroisothionicotinamide 92303-09-8 123855-51-6, 4-Hydroxymethylpiperidine-1-carboxylic acid tert-butyl ester 137225-13-9, 2-Methylamino-4-isonicotinonitrile 143462-35-5, 3-(Dimethylamino)-2-(phenylmethoxy)prop-2-enal 174223-29-1, 2-Methylthiazole-4-carbothioic acid amide 175202-34-3, 2-(2-Thienylsulfonyl)ethanethioamide 175202-41-2, 2-(Furan-2-ylmethanesulfonyl)thioacetamide 175204-46-3, 2,6-Dichloroisothionicotinamide 175276-83-2 175276-88-7, 2-[(4-Fluorophenylmethyl)sulfonyl]thioacetamide 175276-91-2, 2-(2-Pyridylsulfonyl)ethanethioamide 175277-31-3, 2-(tert-Butylsulfonyl)thioacetamide 254982-01-9, 3-[(4-Chlorobenzenesulfonyl)methyl]thiophene-2-carbothioic acid amide 265314-18-9, 3-(2-Oxo-3-trifluoromethyl-2H-pyridin-1-yl)thiopropionamide 727382-54-9 727382-91-4, 2-Thienylthioamide 727383-36-0, 4-(Dimethylamino)-1-methoxybut-3-en-2-one 727383-55-3, 5-(2-Bromoacetyl)-3-bromo-2-methyl-6-oxo-1,6-dihdropyridine 727383-57-5 727383-67-7 727383-74-6, 5-[2-(2-Chloropyridin-4-yl)thiazol-4-yl]-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid 727383-78-0, 5-(2-Bromoacetyl)-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid tert-butyl ester 727383-99-5, Ethyl (2Z)-2-propionyl-3-(dimethylamino)prop-2-enoate 727384-07-8, 3-(2-Bromoacetyl)-6-isopropyl-5-methyl-1H-pyridin-2-one 727384-64-7, 2-(2-Benzoyloxyethyl)-5-(2-bromoacetyl)-6-oxo-1,6-dihdropyridine-3-carboxylic acid ethyl ester 727384-67-0 727384-80-7, 3-Acetyl-6-isopropyl-1H-pyridin-2-one

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)  
 IT 634250-92-3 634250-93-4 634250-94-5, 3: PN: WO03101985 SEQID: 3  
 unclaimed DNA 634250-95-6 634250-96-7 634250-97-8 634250-98-9  
 634250-99-0 634251-00-6 634251-01-7 634251-02-8 634251-03-9  
 RL: PRP (Properties)  
 (unclaimed nucleotide sequence; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

=> b wpix  
FILE 'WPIX' ENTERED AT 14:49:58 ON 18 JUL 2005  
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

FILE LAST UPDATED: 15 JUL 2005 <20050715/UP>  
MOST RECENT DERWENT UPDATE: 200545 <200545/DW>  
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,  
PLEASE VISIT:  
[<<<](http://www.stn-international.de/training_center/patents/stn_guide.pdf)

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE  
<http://thomsonderwent.com/coverage/latestupdates/> <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER  
GUIDES, PLEASE VISIT:  
<http://thomsonderwent.com/support/userguides/> <<<

>>> NEW! FAST-ALERTING ACCESS TO NEWLY-PUBLISHED PATENT  
DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX  
FIRST VIEW - FILE WPIFV.  
FOR FURTHER DETAILS: <http://www.thomsonderwent.com/dwpifv> <<<

>>> THE CPI AND EPI MANUAL CODES HAVE BEEN REVISED FROM UPDATE 200501.

## PLEASE CHECK:

<http://thomsonsonderwent.com/support/dwpieref/reftools/classification/code-revision/>  
 FOR DETAILS. <<<  
 'BIX BI,ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

=> d all 14 tot

L4 ANSWER 1 OF 1 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN  
 AN 2004-553343 [53] WPIX  
 DNC C2004-202500  
 TI New 2-oxopyridin-3-yl thia(di)azole derivatives, useful for treatment of e.g. cell proliferation, cancer, neurological disorder and apoptosis, are serine kinase inhibitors.  
 DC B03  
 IN KALLER, M; NGUYEN, T; NORMAN, M H; RZASA, R M; TEGLEY, C; WANG, H; ZHONG, W  
 PA (KALL-I) KALLER M; (NGUY-I) NGUYEN T; (NORM-I) NORMAN M H; (RZAS-I) RZASA R M; (TEGL-I) TEGLEY C; (WANG-I) WANG H; (ZHON-I) ZHONG W; (AMGE-N) AMGEN INC  
 CYC 106  
 PI WO 2004060890 A1 20040722 (200453)\* EN 317 C07D417-14  
 RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE  
 LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW  
 W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE  
 DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
 KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG  
 PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC  
 VN YU ZA ZM ZW  
 US 2004147561 A1 20040729 (200453) C07D211-84 <--  
 AU 2003299980 A1 20040729 (200477) C07D417-14  
 ADT WO 2004060890 A1 WO 2003-US41388 20031222; US 2004147561 A1  
 Provisional US 2002-436787P 20021227, US 2003-736289 20031212; AU  
 2003299980 A1 AU 2003-299980 20031222  
 FDT AU 2003299980 A1 Based on WO 2004060890  
 PRAI US 2003-736289 20031212; US 2002-436787P  
 20021227  
 IC ICM C07D211-84; C07D417-14  
 ICS A61K031-4412; A61K031-4439; A61P035-00; C07D417-04; C07D471-04;  
 C07D491-04  
 AB WO2004060890 A UPAB: 20040818  
 NOVELTY - Dihydropyridin-3-yl-thia(di)azole derivatives (I) are new.  
 DETAILED DESCRIPTION - Dihydropyridin-3-yl-thia(di)azole derivatives of formula (I) and their derivatives are new.  
 A = O or S;  
 Q = aryl or monocyclic or bicyclic nonaromatic carbocycle, heteroaryl or non-aromatic heterocycle (all optionally substituted by one or more Q1), N(R5)2, NR5C(O)R5, (1-8C alkyl)-OR5, (1-8C alkyl)-S(O)nR6 or NR4SO2R6;  
 Q1 = 1-8C alkyl, 2-8C alkynyl, 2-8C alkenyl, OR5, methylenedioxy, ethylenedioxy, N(R5)2, (1-8C alkyl)-N(R5)2, 1-8C haloalkyl, lower cyanoalkyl, (1-8C alkyl)-OR5, lower alkylaminoalkoxy, lower aminoalkoxyalkyl, (1-8C alkyl)-S(O)nR5, NR5-1-8C alkylene-N(R5)2, NR5-1-8C alkylene-OR5, NR5-1-8C alkylene-NHC(O)R5, NR5-1-8C alkylene-C(O)N(R5)2, lower alkoxyalkyl, S(O)nR5, SO2N(R5)2, NR5S(O)nR5, CN, NO2, 3-10C cycloalkyl, aryl, 4-7 membered heterocyclyl, phenylalkyl, heterocyclylalkyl, phenoxyalkyl or heterocyclyloxyalkyl (all optionally substituted), C(O)N(R5)2, CO2R5, CO2N(R5)2, SO2NHC(O)R5, NR5C(O)N(R5)2, NR5C(O)R5, NR5CO2R5 or C(O)R5;  
 W = 4,2-thiazolylene or 5,3-(1,2,4)thiadiazolylene;  
 R1-R3 = H, OR6, halo, aryl, 1-8C alkyl, 2-8C alkenyl, 2-8C alkynyl, 1-8C perfluoroalkyl, N(R5)2, (1-8C alkyl)-N(R5)2, (1-8C alkyl)-OR5, S(O)n-alkyl, S(O)n-aryl, S(O)n-heteroaryl, 3-10C cycloalkyl, NO2, heterocyclyl, NR5SO2R5, C(O)N(R5)2, CO2R5, (C(R5)2)m-aryl, (C(R5)2)m-heterocyclyl, NR5C(O)N(R5)2, NR5C(O)R5, NR5CO2R5 or C(O)R5; or  
 R1+R2 or R2+R3 = 5-10 membered optionally unsaturated carbocyclic or heterocyclic ring;

R4 = H or 1-6C alkyl;  
 R5 = H or T;

T = aryl, aralkyl, heterocyclyl, heterocyclylalkyl, 3-6C cycloalkyl or 3-6C cycloalkyl-alkyl (all optionally substituted), lower alkyl, lower alkylamino-lower alkyl, aryloxyalkyl, alkylcarbonylalkyl or lower perfluoroalkyl;

R6 = T;

m = 1-8; and

n = 0-2.

where (hetero)aryl, cycloalkyl, heterocyclyl moiety of any R1-R3, R5, R6 and Q may be optionally substituted by one or more halogen, NH<sub>2</sub>, OH, CO<sub>2</sub>H, 1-6C alkylamino, 1-6C alkoxy, 1-6C alkoxyalkyl, 1-6C alkyl, di(1-6C alkylamino), phenyl or heterocyclyl;  
 provided that

(a) R1 is not CF<sub>3</sub> when R2 = ethoxycarbonyl, R3 = H, W = thiazolylene and Q = 4-pyridyl or 2-chloro-4-pyridyl;

(b) Q is not 4-pyridyl when W = thiazolylene and R1-R3 = H;

(c) Q is not 2-nitro-5-furyl when W = thiazolylene, R1 = methyl and R2, R3 = H;

(d) Q is not phenyl when W = thiazolylene, R1, R3 = methyl and R2 = H;

(e) Q is not phenyl, 3,4-diacetylphenyl or 3,4-dihydroxyphenyl when W = thiazolylene and R1-R3 = H; and

(f) Q is not 3-cyano-6-methyl-2-oxo-1,2-dihydro-5-pyridyl when W = thiazolylene, R1 = methyl, R3 = H and R2 = acetyl.

ACTIVITY - Cytostatic; Neuroprotective; Immunostimulant; Anti-HIV; Immunomodulator; Dermatological; Nephrotropic; Antirheumatic; Antiarthritic; Antidiabetic; Antianemic; Vasotropic; Cerebroprotective; Ophthalmological; Antiarrhythmic; Antiarteriosclerotic; Hepatotropic; Muscular-Gen.; Osteopathic; Antiinflammatory; CNS-Gen.; Respiratory-Gen.; Analgesic.

MECHANISM OF ACTION - Serine kinase inhibitor; Threonine kinase inhibitor; Cyclin dependent kinase 5 (CDK5) inhibitor; CDK2 inhibitor.

(I) were assessed for CDK inhibitory activity in insect cells. The median inhibitory concentration of ethyl 2-ethyl-6-oxo-5-(2-(4-pyridyl)(1,3-thiazol-4-yl)-1,6-dihydro-3-pyridinecarboxylate was 0.5 micro M.

USE - (I) are useful for the preparation of medicament for the treatment of cell proliferation, cancer, neurological disorder or apoptosis in human or animal and as anti-neoplastic agents (all claimed). (I) may also be used for the prevention of AIDS development in HIV-infected individuals, autoimmune disorders (e.g. systemic lupus erythematosus, autoimmune mediated glomerulonephritis, rheumatoid arthritis and autoimmune diabetes mellitus), myelodysplastic syndromes, aplastic anemia, ischemic injury associated with myocardial infarction, stroke and reperfusion injury, vision related disorders (e.g. glaucoma and macular degeneration), arrhythmia, atherosclerosis, toxin-induced or alcohol related liver diseases, hematological diseases (e.g. chronic or aplastic anemia), degenerative diseases of the musculo-skeletal system (e.g. osteoporosis), aspirin-sensitive rhino-sinusitis, cystic fibrosis, kidney diseases and cancer pain.

ADVANTAGE - (I) are strongly inhibitory against various kinases.

Dwg.0/0

FS CPI

FA AB; GI; DCN

MC CPI: B06-H; B07-D04D; B14-A02B1; B14-C01; B14-C09B; B14-D06; B14-F01A; B14-F01E; B14-F02D; B14-F03; B14-F05; B14-F07; B14-G01B; B14-G02D; B14-H01B; B14-J01; B14-J02; B14-J05; B14-K01; B14-N01; B14-N03; B14-N04; B14-N10; B14-N12; B14-N16; B14-S04

=> b home  
 FILE 'HOME' ENTERED AT 14:50:10 ON 18 JUL 2005

=>

=> d. his full

(FILE 'HOME' ENTERED AT 14:47:55 ON 18 JUL 2005)

FILE 'HCAPLUS' ENTERED AT 14:48:09 ON 18 JUL 2005  
L1 1 SEA ABB=ON PLU=ON US20040147561/PN OR US2002-436787#/AP, PRN  
D KWIC

FILE 'REGISTRY' ENTERED AT 14:49:14 ON 18 JUL 2005

FILE 'HCAPLUS' ENTERED AT 14:49:16 ON 18 JUL 2005  
L2 TRA L1 1- RN : 403 TERMS

FILE 'REGISTRY' ENTERED AT 14:49:16 ON 18 JUL 2005  
L3 403 SEA ABB=ON PLU=ON L2

FILE 'WPIX' ENTERED AT 14:49:20 ON 18 JUL 2005  
L4 1 SEA ABB=ON PLU=ON US20040147561/PN OR US2002-436787#/AP, PRN

FILE 'REGISTRY' ENTERED AT 15:05:36 ON 18 JUL 2005

L5 STR  
L6 STR L5  
L7 0 SEA CSS SAM L6  
L8 SCR 1839  
L9 SCR 1583  
L10 SCR 1263 OR 1270  
L11 STR L6  
L12 0 SEA CSS SAM L11 AND L8 AND L10  
E NSCNC/ES  
L13 20979 SEA ABB=ON PLU=ON NSCNC/ES  
L14 2 SEA ABB=ON PLU=ON C20H23N3S AND L13  
L15 31908 SEA ABB=ON PLU=ON NCSC2/ES AND NR=1  
L16 22693 SEA ABB=ON PLU=ON NR>=2 AND NC5/ES AND (16.299.11 OR  
16.520.14)/RID  
L17 20 SEA SUB=L16 SSS SAM L11  
L18 388 SEA SUB=L16 SSS FUL L11  
SAV TEM DAV289FO/A L18

FILE 'HCAPLUS' ENTERED AT 15:33:09 ON 18 JUL 2005  
L19 25 SEA ABB=ON PLU=ON L18  
E ZHONG W/AU  
L20 281 SEA ABB=ON PLU=ON ("ZHONG W"/AU OR "ZHONG W B"/AU OR "ZHONG  
W D"/AU OR "ZHONG W H"/AU OR "ZHONG W J"/AU OR "ZHONG W L"/AU  
OR "ZHONG W M"/AU OR "ZHONG W R"/AU OR "ZHONG W W"/AU OR  
"ZHONG W WILLIAM"/AU OR "ZHONG W Z"/AU)  
E ZHONG WENGE/AU  
L21 17 SEA ABB=ON PLU=ON "ZHONG WENGE"/AU  
E NORMAN M/AU  
L22 37 SEA ABB=ON PLU=ON ("NORMAN M"/AU OR "NORMAN M H"/AU)  
E NORMAN HENRY/AU  
E NORMAN MARK/AU  
L23 67 SEA ABB=ON PLU=ON ("NORMAN MARK"/AU OR "NORMAN MARK H"/AU OR  
"NORMAN MARK HENRY"/AU)  
E NORMAN MARCUS/AU  
E KALLER M/AU  
L24 9 SEA ABB=ON PLU=ON ("KALLER M R"/AU OR "KALLER MATT"/AU OR  
"KALLER MATTHEW"/AU OR "KALLER MATTHEW R"/AU)  
E NGUYEN T/AU  
L25 989 SEA ABB=ON PLU=ON ("NGUYEN T"/AU OR "NGUYEN T A"/AU OR  
"NGUYEN T ANH"/AU OR "NGUYEN T B"/AU OR "NGUYEN T BUU"/AU OR  
"NGUYEN T C"/AU OR "NGUYEN T D"/AU OR "NGUYEN T DUNG"/AU OR  
"NGUYEN T G"/AU OR "NGUYEN T H"/AU OR "NGUYEN T H B"/AU OR  
"NGUYEN T H BRUCE"/AU OR "NGUYEN T H L"/AU OR "NGUYEN T H  
LY"/AU OR "NGUYEN T H T"/AU OR "NGUYEN T H Y"/AU OR "NGUYEN T  
HIEN"/AU OR "NGUYEN T HIEP"/AU OR "NGUYEN T HUNG"/AU OR  
"NGUYEN T K"/AU OR "NGUYEN T K A"/AU OR "NGUYEN T K D"/AU OR

"NGUYEN T K DZUNG"/AU OR "NGUYEN T K PHUONG"/AU OR "NGUYEN T L"/AU OR "NGUYEN T L UYEN"/AU OR "NGUYEN T LEN"/AU OR "NGUYEN T M"/AU OR "NGUYEN T M A"/AU OR "NGUYEN T M D"/AU OR "NGUYEN T MAI DUNG"/AU OR "NGUYEN T MINH"/AU OR "NGUYEN T MINH N"/AU OR "NGUYEN T N"/AU OR "NGUYEN T N M"/AU OR "NGUYEN T P"/AU OR "NGUYEN T PAUL"/AU OR "NGUYEN T PHU"/AU OR "NGUYEN T Q"/AU OR "NGUYEN T S"/AU OR "NGUYEN T T"/AU OR "NGUYEN T T A"/AU OR "NGUYEN T T ANH"/AU OR "NGUYEN T T D"/AU OR "NGUYEN T T H"/AU OR "NGUYEN T T T"/AU OR "NGUYEN T T TAM"/AU OR "NGUYEN T T TUYEN"/AU OR "NGUYEN T THI"/AU OR "NGUYEN T THUONG"/AU OR "NGUYEN T TRANG"/AU OR "NGUYEN T U"/AU OR "NGUYEN T V"/AU OR "NGUYEN T VAN"/AU OR "NGUYEN T X"/AU OR "NGUYEN T X C"/AU OR "NGUYEN T X Q"/AU OR "NGUYEN T Z"/AU)  
E NGUYEN TOM/AU  
L26 10 SEA ABB=ON PLU=ON ("NGUYEN TOM"/AU OR "NGUYEN TOM P"/AU OR "NGUYEN TOM T"/AU)  
E NGUYEN THOMAS/AU  
L27 37 SEA ABB=ON PLU=ON ("NGUYEN THOMAS"/AU OR "NGUYEN THOMAS A"/AU OR "NGUYEN THOMAS B"/AU OR "NGUYEN THOMAS D"/AU OR "NGUYEN THOMAS T"/AU OR "NGUYEN THOMAS THE"/AU OR "NGUYEN THOMAS X T"/AU)  
E RZASA R.AU  
E RZASA R/AU  
L28 18 SEA ABB=ON PLU=ON ("RZASA R M"/AU OR "RZASA ROBERT"/AU OR "RZASA ROBERT M"/AU OR "RZASA ROBERT MICHAEL"/AU)  
E TEGLEY C/AU  
L29 49 SEA ABB=ON PLU=ON ("TEGLEY C M"/AU OR "TEGLEY CHRISTOPHER"/AU OR "TEGLEY CHRISTOPHER M"/AU)  
E WANG H.AU  
E WANG H/AU  
L30 1773 SEA ABB=ON PLU=ON ("WANG H"/AU OR "WANG H L"/AU)  
E WANG HUI/AU  
L31 1298 SEA ABB=ON PLU=ON ("WANG HUI"/AU OR "WANG HUI LIN"/AU OR "WANG HUI LING"/AU)  
E WANG HUILIN/AU  
L32 53 SEA ABB=ON PLU=ON ("WANG HUILIN"/AU OR "WANG HUILING"/AU)  
E AMGEN/CS, PA  
L33 2002 SEA ABB=ON PLU=ON AMGEN/CS, PA  
L34 2 SEA ABB=ON PLU=ON L19 AND (L20 OR L21 OR L22 OR L23 OR L24 OR L25 OR L26 OR L27 OR L28 OR L29 OR L30 OR L31 OR L32 OR L33)  
L35 23 SEA ABB=ON PLU=ON L19 NOT L34  
SEL HIT RN L35

FILE 'REGISTRY' ENTERED AT 15:39:28 ON 18 JUL 2005

L36 67 SEA ABB=ON PLU=ON (216011-87-9/BI OR 191166-45-7/BI OR 216012-90-7/BI OR 216012-93-0/BI OR 216970-48-8/BI OR 216970-55-7/BI OR 380830-41-1/BI OR 101367-61-7/BI OR 137310-12-4/BI OR 145737-03-7/BI OR 145738-49-4/BI OR 145738-51-8/BI OR 185950-50-9/BI OR 200482-30-0/BI OR 214040-91-2/BI OR 216012-89-4/BI OR 216970-58-0/BI OR 216970-59-1/BI OR 216970-60-4/BI OR 216970-61-5/BI OR 216970-63-7/BI OR 216970-64-8/BI QR 216970-68-2/BI OR 216970-70-6/BI OR 216970-72-8/BI OR 216970-73-9/BI OR 216970-74-0/BI OR 216970-88-6/BI OR 216970-89-7/BI OR 216970-92-2/BI OR 216970-93-3/BI OR 216971-04-9/BI OR 229184-02-5/BI OR 229184-03-6/BI OR 229184-04-7/BI OR 380830-42-2/BI OR 380830-43-3/BI OR 380830-49-9/BI OR 433217-26-6/BI OR 433217-27-7/BI OR 433217-28-8/BI OR 433217-29-9/BI OR 433217-30-2/BI OR 489466-61-7/BI OR 489466-62-8/BI OR 500165-82-2/BI OR 500165-86-6/BI OR 500166-04-1/BI OR 500166-05-2/BI OR 500725-33-7/BI OR 500725-34-8/BI OR 500725-63-3/BI OR 500725-64-4/BI OR 500725-81-5/BI OR 500725-88-2/BI OR 500725-93-9/BI OR 500725-95-1/BI OR 503301-92-6/BI OR 503301-93-7/BI OR 503302-02-1/BI OR 504393-01-5/BI OR 504393-03-7/BI OR 54317-44-1/BI OR 691387-29-8/BI OR 77691-74-8/BI OR 87947-97-5/BI OR 92017-53-3/BI)  
STR L11

L38           19 SEA SUB=L18 SSS SAM L37  
 L39           332 SEA SUB=L18 SSS FUL L37  
               SAV TEM DAV289S0/A L39

FILE 'HCAPLUS' ENTERED AT 15:55:14 ON 18 JUL 2005  
 L40           22 SEA ABB=ON PLU=ON L39  
 L41           2 SEA ABB=ON PLU=ON L40 AND (L20 OR L21 OR L22 OR L23 OR L24  
               OR L25 OR L26 OR L27 OR L28 OR L29 OR L30 OR L31 OR L32 OR  
               L33)  
 L42           2 SEA ABB=ON PLU=ON L34 OR L41  
 L43           20 SEA ABB=ON PLU=ON L40 NOT L42  
               SEL HIT RN L43

FILE 'REGISTRY' ENTERED AT 15:55:54 ON 18 JUL 2005  
 L44           22 SEA ABB=ON PLU=ON (216011-87-9/BI OR 191166-45-7/BI OR  
               101367-61-7/BI OR 137310-12-4/BI OR 145737-03-7/BI OR 145738-49  
               -4/BI OR 145738-51-8/BI OR 185950-50-9/BI OR 200482-30-0/BI OR  
               214040-91-2/BI OR 380830-49-9/BI OR 489466-61-7/BI OR 489466-62  
               -8/BI OR 500725-93-9/BI OR 500725-95-1/BI OR 503302-02-1/BI OR  
               504393-01-5/BI OR 504393-03-7/BI OR 54317-44-1/BI OR 77691-74-8  
               /BI OR 87947-97-5/BI OR 92017-53-3/BI)  
               DEL SEL Y  
               D SCA  
 L45           13 SEA ABB=ON PLU=ON L44 NOT (C16H14N2OS OR C22H18CLN3O2S OR  
               C14H16N2O5S OR C14H10N2O3S OR C14H10N2OS OR C18H14N4O3S OR  
               C13H9N3O4S OR C16H14N2OS)  
               D SCA  
 L46           11 SEA ABB=ON PLU=ON L45 NOT (C18H14N2O5S OR C14H14N2O5S)  
 L47           13 SEA ABB=ON PLU=ON L44 AND (L45 OR L46)  
 L48           9 SEA ABB=ON PLU=ON L44 NOT L47  
 L49           2 SEA ABB=ON PLU=ON DIMETHOXYMETHYL AND L48

FILE 'HCAPLUS' ENTERED AT 16:08:45 ON 18 JUL 2005  
 L50           11 SEA ABB=ON PLU=ON L46 AND L43  
 L51           QUE ABB=ON PLU=ON PY<=2002 OR PRY<=2002 OR AY<=2002  
 L52           10 SEA ABB=ON PLU=ON L50 AND L51  
 L53           11 SEA ABB=ON PLU=ON L50 OR L52

FILE 'HCAOLD' ENTERED AT 16:09:49 ON 18 JUL 2005  
 L54           0 SEA ABB=ON PLU=ON L46

FILE 'USPATFULL, USPAT2' ENTERED AT 16:09:56 ON 18 JUL 2005  
 L55           2 SEA ABB=ON PLU=ON L46  
 L56           8 SEA ABB=ON PLU=ON L39  
 L57           6 SEA ABB=ON PLU=ON L56 NOT L55  
 L58           2 SEA ABB=ON PLU=ON ("2004:190788"/AN OR "2004:294735"/AN) AND  
               L57  
 L59           4 SEA ABB=ON PLU=ON L57 NOT L58  
 L60           4 SEA ABB=ON PLU=ON L59 AND L51  
 L61           4 SEA ABB=ON PLU=ON (L59 OR L60)

FILE 'HCAOLD' ENTERED AT 16:15:15 ON 18 JUL 2005  
 L62           1 SEA ABB=ON PLU=ON L39

FILE 'REGISTRY' ENTERED AT 16:15:29 ON 18 JUL 2005  
 L63           1 SEA ABB=ON PLU=ON 92017-53-3/RN

=> b reg

FILE 'REGISTRY' ENTERED AT 16:16:53 ON 18 JUL 2005  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
 provided by InfoChem.

STRUCTURE FILE UPDATES: 17 JUL 2005 HIGHEST RN 855596-49-5  
 DICTIONARY FILE UPDATES: 17 JUL 2005 HIGHEST RN 855596-49-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

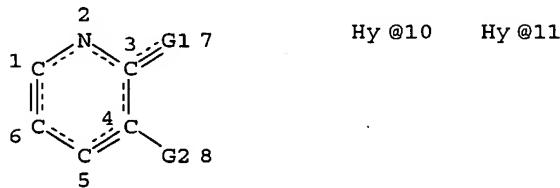
Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*  
 \*  
 \* The CA roles and document type information have been removed from \*  
 \* the IDE default display format and the ED field has been added, \*  
 \* effective March 20, 2005. A new display format, IDERL, is now \*  
 \* available and contains the CA role and document type information. \*  
 \*  
 \*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

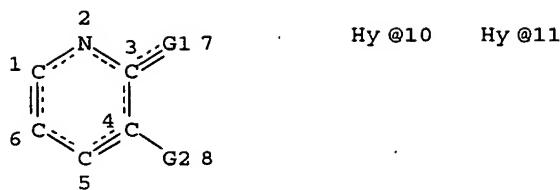
=> d que sta 139  
 L11 STR



VAR G1=O/S  
 VAR G2=10/11  
 NODE ATTRIBUTES:  
 CONNECT IS M2 RC AT 10  
 CONNECT IS M2 RC AT 11  
 DEFAULT MLEVEL IS ATOM  
 GGCAT IS UNS AT 10  
 GGCAT IS UNS AT 11  
 · DEFAULT ECLEVEL IS LIMITED  
 ECOUNT IS E3 C E1 N E1 S AT 10  
 ECOUNT IS E2 C E2 N E1 S AT 11

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE  
 L16        22693 SEA FILE=REGISTRY ABB=ON PLU=ON NR>=2 AND NC5/ES AND  
               (16.299.11 OR 16.520.14)/RID  
 L18        388 SEA FILE=REGISTRY SUB=L16 SSS FUL L11  
 L37        STR



```
VAR G1=O/S
VAR G2=10/11
NODE ATTRIBUTES:
CONNECT IS E2 RC AT   2
CONNECT IS M2 RC AT  10
CONNECT IS M2 RC AT  11
DEFAULT MLEVEL IS ATOM .
GGCAT  IS UNS  AT  10
GGCAT  IS UNS  AT  11
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS E3 C E1 N E1 S AT 10
ECOUNT IS E2 C E2 N E1 S AT 11
```

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE  
L39 332 SEA FILE=REGISTRY SUB=L18 SSS FUL L37

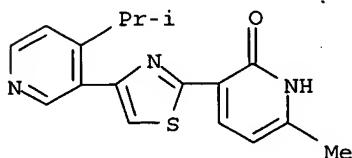
100.0% PROCESSED      388 ITERATIONS      332 ANSWERS  
SEARCH TIME: 00.00.01

=> d ide 146 tot

L46 ANSWER 1 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 504393-03-7 REGISTRY  
ED Entered STN: 24 Apr 2003  
CN 2 (1H)-Pyridinone, 6-methyl-3-[4-[4-(1-methylethyl)-3-pyridinyl]-2-thiazolyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)  
MF C17 H17 N3 O S . C2 H F3 O2  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER

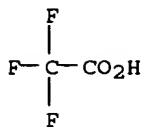
CM 1

CRN 504393-02-6  
CMF C17 H17 N3 O S



CM 2

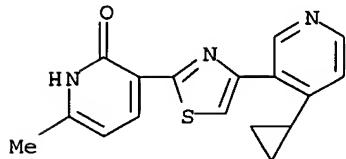
CRN 76-05-1  
CMF C2 H F3 O2



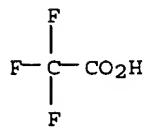
1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L46 ANSWER 2 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 504393-01-5 REGISTRY  
 ED Entered STN: 24 Apr 2003  
 CN 2 (1H)-Pyridinone, 3-[4-(4-cyclopropyl-3-pyridinyl)-2-thiazolyl]-6-methyl-,  
 mono(trifluoroacetate) (9CI) (CA INDEX NAME)  
 MF C17 H15 N3 O S . C2 H F3 O2  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

CM 1

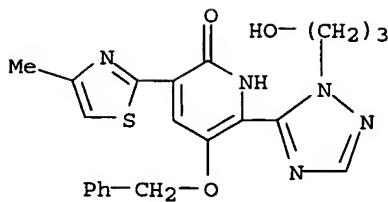
CRN 504393-00-4  
CMF C17 H15 N3 O S

CM 2

CRN 76-05-1  
CMF C2 H F3 O2

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

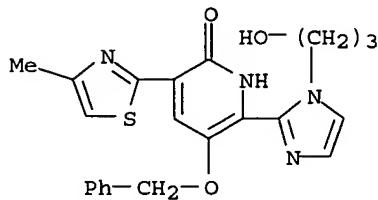
L46 ANSWER 3 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 500725-95-1 REGISTRY  
 ED Entered STN: 26 Mar 2003  
 CN 2 (1H)-Pyridinone, 6-[1-(3-hydroxypropyl)-1H-1,2,4-triazol-5-yl]-3-(4-methyl-2-thiazolyl)-5-(phenylmethoxy)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C21 H21 N5 O3 S  
 SR CA  
 LC STN Files: CA, CAPLUS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

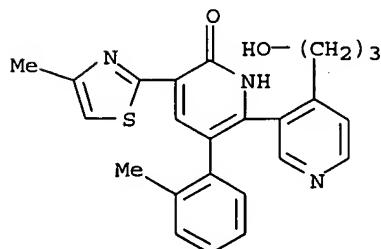
L46 ANSWER 4 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 500725-93-9 REGISTRY  
ED Entered STN: 26 Mar 2003  
CN 2 (1H)-Pyridinone, 6-[1- (3-hydroxypropyl)-1H-imidazol-2-yl]-3- (4-methyl-2-thiazolyl)-5- (phenylmethoxy)- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C22 H22 N4 O3 S  
SR CA  
LC STN Files: CA, CAPLUS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

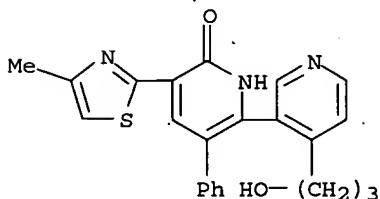
L46 ANSWER 5 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 489466-62-8 REGISTRY  
ED Entered STN: 13 Feb 2003  
CN [2,3'-Bipyridin]-6(1H)-one, 4'-(3-hydroxypropyl)-3-(2-methylphenyl)-5-(4-methyl-2-thiazolyl)- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C24 H23 N3 O2 S  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

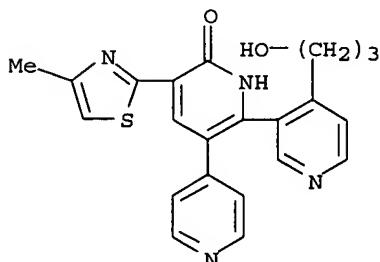
L46 ANSWER 6 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 489466-61-7 REGISTRY  
 ED Entered STN: 13 Feb 2003  
 CN [2,3'-Bipyridin]-6(1H)-one, 4'-(3-hydroxypropyl)-5-(4-methyl-2-thiazolyl)-  
 3-phenyl- (9CI). (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C23 H21 N3 O2 S  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L46 ANSWER 7 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 380830-49-9 REGISTRY  
 ED Entered STN: 08 Jan 2002  
 CN [3,2':3',4'''-Terpyridin]-6'(1'H)-one, 4-(3-hydroxypropyl)-5'-(4-methyl-2-thiazolyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C22 H20 N4 O2 S  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

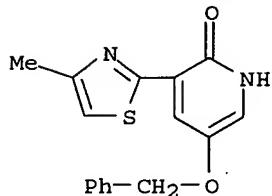


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L46 ANSWER 8 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 216011-87-9 REGISTRY

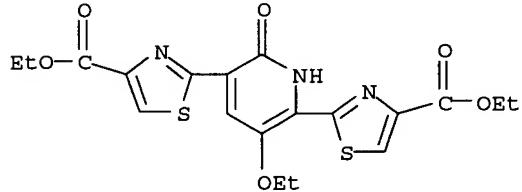
ED    Entered STN: 23 Dec 1998  
 CN    2 (1H)-Pyridinone, 3-(4-methyl-2-thiazolyl)-5-(phenylmethoxy)- (9CI)    (CA INDEX NAME)  
 FS    3D CONCORD  
 MF    C16 H14 N2 O2 S  
 SR    CA  
 LC    STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1907 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

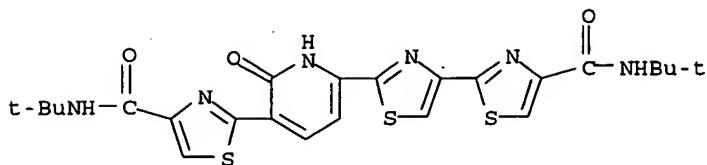
L46    ANSWER 9 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN    191166-45-7 REGISTRY  
 ED    Entered STN: 15 Jul 1997  
 CN    4-Thiazolecarboxylic acid, 2,2'-(3-ethoxy-1,6-dihydro-6-oxo-2,5-pyridinediyl)bis-, diethyl ester (9CI) (CA INDEX NAME)  
 FS    3D CONCORD  
 MF    C19 H19 N3 O6 S2  
 SR    CA  
 LC    STN Files: CA, CAPLUS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

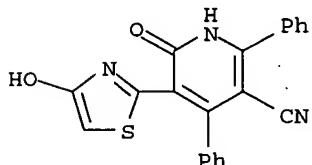
L46    ANSWER 10 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN    137310-12-4 REGISTRY  
 ED    Entered STN: 15 Nov 1991  
 CN    [2,4'-Bithiazole]-4-carboxamide, N-(1,1-dimethylethyl)-2'-[5-[4-[(1,1-dimethylethyl)amino]carbonyl]-2-thiazolyl]-1,6-dihydro-6-oxo-2-pyridinyl (9CI) (CA INDEX NAME)  
 FS    3D CONCORD  
 MF    C24 H26 N6 O3 S3  
 SR    CA  
 LC    STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT  
 (\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L46 ANSWER 11 OF 11 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 87947-97-5 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN 3-Pyridinecarbonitrile, 1,6-dihydro-5-(4-hydroxy-2-thiazolyl)-6-oxo-2,4-diphenyl- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C21 H13 N3 O2 S  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT  
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> b hcap  
FILE 'HCAPLUS' ENTERED AT 16:17:09 ON 18 JUL 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 18 Jul 2005 VOL 143 ISS 4  
FILE LAST UPDATED: 17 Jul 2005 (20050717/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate

substance identification.

=> d all fhitstr 142 tot

L42 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2004:589549 HCAPLUS  
 DN 141:140450  
 ED Entered STN: 23 Jul 2004  
 TI Preparation of 2-oxopyridin-3-yl thia(di)azoles as Cdk2 and Cdk5 kinase inhibitors for the treatment of cell proliferation-related disorders  
 IN Zhong, Wenge; Norman, Mark Henry; Kaller, Matthew; Nguyen, Thomas; Rzasa, Robert Michael; Tegley, Christopher; Wang, Hui-Ling  
 PA Amgen Inc., USA  
 SO PCT Int. Appl., 317 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C07D417-14  
 ICS C07D417-04; C07D471-04; C07D491-04; A61K031-4412; A61P035-00  
 CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 1, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004060890	A1	20040722	WO 2003-US41388	20031222
	WO 2004060890	C1	20040826		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2004147561	A1	20040729	US 2003-736289	20031212
PRAI	US 2002-436787P	P	20021227		
	US 2003-736289	A	20031212		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2004060890	ICM	C07D417-14
		ICS	C07D417-04; C07D471-04; C07D491-04; A61K031-4412; A61P035-00
	WO 2004060890	ECLA	C07D417/04+277B+213; C07D417/14+277B+213+213; C07D417/14+277B+277B+213; C07D417/14+307B+277B+213; C07D417/14+317+277B+213; C07D417/14+333B+277B+213; C07D417/14R+277B+213; C07D417/14R+277B+213+207; C07D417/14R+277B+213+211; C07D417/14R+277B+263B+213; C07D417/14R+277B+275+213; C07D417/14R+307B+277B+213; C07D417/14R+333B+277B+213; C07D471/04+221B+221B; C07D471/04+221B+221B+2; C07D491/04+311B+221B
	US 2004147561	NCL	514/340.000; 514/345.000; 546/268.100; 546/300.000
		ECLA	C07D417/04+277B+213; C07D417/14+277B+213+213; C07D417/14+277B+277B+213; C07D417/14+307B+277B+213; C07D417/14+317+277B+213; C07D417/14+333B+277B+213; C07D417/14R+277B+213; C07D417/14R+277B+213+207; C07D417/14R+277B+213+211; C07D417/14R+277B+263B+213; C07D417/14R+307B+277B+213; C07D417/14R+333B+277B+213; C07D417/14R+377B+213; C07D417/04+221B+221B+2; C07D491/04+311B+221B

OS MARPAT 141:140450  
 GI

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [wherein A = O or S; Q = NH<sub>2</sub> and derivs., NHC(:O)H, alkyl-OH and derivs., (un)substituted monocyclic or bicyclic, etc; W = (un)substituted 1,3-thiazolyl, 1,2,4-thiadiazolyl; R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> = independently H, halo, aryl, alk(en/yn)yl, perfluoroalkyl, NO<sub>2</sub>, heterocyclyl, NH<sub>2</sub> and derivs., etc.; R1CCR2 or R2CCR3 = 5-10 membered (un)saturated carbocyclic or heterocyclic and derivs.; with provisos; and pharmaceutically acceptable salts thereof] are disclosed as serine/threonine kinase inhibitors for effective treatment of cell proliferation or apoptosis-mediated diseases (no data). The invention encompasses I and pharmaceutically acceptable derivs. thereof, pharmaceutical compns., and methods for prophylaxis and treatment of diseases and other maladies or conditions involving stroke, cancer, and the like (no data). For example, II was prepared by cyclization of bromoacetylpyridinone (III) (preparation given) with 2-(2-thienylsulfonyl)ethanethioamide in EtOH under microwave conditions at 150° for 5 min. II exhibited Cdk2/cyclin and Cdk5/p25 kinase activity with IC<sub>50</sub> values < 0.5 μM and inhibited cell proliferation of human PC-3 prostate cells, HCT 116 human colon carcinoma cells, or HT 29 human colon carcinoma cells with IC<sub>50</sub> < 1 μM.

ST thiadiazole prepn cyclin dependent kinase inhibitor antiproliferative apoptosis; anticancer stroke treatment oxopyridine thiazole prepn Cdk2 Cdk5 inhibitor

IT Intestine, neoplasm  
(colon, treatment; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT Cell proliferation  
(inhibition; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT Antitumor agents  
Apoptosis  
Human  
Nervous system agents  
(preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT Brain, disease  
(stroke, treatment; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT Neoplasm  
Nervous system, disease  
Prostate gland, neoplasm  
(treatment; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT 727383-80-4P, 2-Methyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid trifluoroacetate  
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(Cdk2/Cdk5 inhibitor; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT 727382-46-9P, Ethyl 2-ethyl-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydropyridine 3-carboxylate 727382-58-3P, Ethyl 2-isopropyl-6-oxo-5-[2-(4-pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-61-8P, Ethyl 2-isopropyl-6-oxo-5-[2-[(phenylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-78-7P 727383-04-2P, Ethyl 5-[2-(2-chloro-4-pyridinyl)-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-27-9P, Ethyl 5-[2-(4-Methoxybenzylamino)pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-30-4P, Ethyl 2-methyl-5-[2-(methylamino)-1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-52-0P , 2-(Isopropyl)-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-

pyridinecarboxylic acid 727383-77-9P, 1,1-Dimethylethyl  
 2-methyl-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-  
 pyridinecarboxylate 727383-89-3P, 5-Hydroxymethyl-6-methyl-3-[2-  
 (pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-52-3P,  
 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-  
 dihydropyridine-3-carboxylic acid (2-hydroxyethyl)amide  
 727384-54-5P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-  
 yl]-1,6-dihydropyridine-3-carboxylic acid (2-hydroxypropyl)amide  
 727384-61-4P, 2-(2-Benzylxyethyl)-6-oxo-5-[2-(pyridin-4-yl)-1,3-  
 thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid ethyl ester  
 727384-65-8P, 2-(2-Hydroxyethyl)-6-oxo-5-[2-(pyridin-4-yl)-1,3-  
 thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid ethyl ester  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic  
 preparation); THU (Therapeutic use); BIOL (Biological study); PREP  
 (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (Cdk2/Cdk5 inhibitor; preparation of quinazolines as Cdk2 and Cdk5 kinase  
 inhibitors for treatment of cell proliferation-related disorders)

IT 727382-48-1P 727382-49-2P, Ethyl 2-ethyl-6-oxo-5-[2-  
 [(phenylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-  
 pyridinecarboxylate 727382-50-5P, Ethyl 2-ethyl-6-oxo-5-[2-  
 (benzodioxol-5-yl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
 727382-51-6P, Ethyl 6-oxo-5-[2-[(phenylsulfonyl)methyl]-1,3-  
 thiazol-4-yl]-2-(trifluoromethyl)-1,6-dihydro-3-pyridinecarboxylate  
 727382-53-8P, Ethyl 2-trifluoromethyl-6-oxo-5-[2-(3-chloro-4-  
 pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
 727382-55-0P, Ethyl 6-oxo-5-[2-[(2-pyridylsulfonyl)methyl]-1,3-  
 thiazol-4-yl]-2-(trifluoromethyl)-1,6-dihydro-3-pyridinecarboxylate  
 727382-56-1P, Ethyl 6-oxo-5-[2-[(2-thienylsulfonyl)methyl]-1,3-  
 thiazol-4-yl]-2-(trifluoromethyl)-1,6-dihydro-3-pyridinecarboxylate  
 727382-57-2P, Ethyl 2-trifluoromethyl-6-oxo-5-[2-(4-pyridyl)-1,3-  
 thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-60-7P,  
 Ethyl 2-isopropyl-6-oxo-5-[2-[(2-thienylsulfonyl)methyl]-1,3-thiazol-4-yl]-  
 1,6-dihydro-3-pyridinecarboxylate 727382-62-9P, Ethyl  
 2-propyl-6-oxo-5-[2-(4-pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-  
 pyridinecarboxylate 727382-65-2P, Ethyl 2-propyl-6-oxo-5-[2-  
 [(phenylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-  
 pyridinecarboxylate 727382-66-3P, Ethyl 2-propyl-6-oxo-5-[2-(2-  
 thiethylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-  
 pyridinecarboxylate 727382-67-4P, Ethyl 6-oxo-2-  
 [(phenylmethoxy)methyl]-5-[2-(4-pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-  
 pyridinecarboxylate 727382-71-0P, Ethyl 6-oxo-2-  
 [(phenylmethoxy)methyl]-5-[2-[(phenylsulfonyl)methyl]-1,3-thiazol-4-yl]-  
 1,6-dihydro-3-pyridinecarboxylate 727382-72-1P  
 727382-74-3P, 3-[2-(Pyridin-4-yl)-1,3-thiazol-4-yl]-1,7,8-trihydro-  
 SH-pyrano[4,3-b]pyridin-2-one 727382-76-5P 727382-79-8P  
 , 3-[2-(Pyridin-4-yl)-1,3-thiazol-4-yl]-1,5,6,7,8-pentahydropyridino[3,2-  
 c]pyridin-2-one dihydrochloride 727382-80-1P, Ethyl  
 2-[[[(4-methoxyphenyl)methoxy]methyl]-6-oxo-5-[2-(4-pyridyl)-1,3-thiazol-4-  
 yl]-1,6-dihydro-3-pyridinecarboxylate 727382-85-6P, Ethyl  
 2-methyl-6-oxo-5-[2-[(2-thienylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-  
 dihydro-3-pyridinecarboxylate 727382-87-8P, Ethyl 5-[2-[[[(4-  
 chlorophenyl)sulfonyl]methyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-  
 3-pyridinecarboxylate 727382-89-0P, Ethyl 5-[2-[[[(4-  
 fluorophenyl)methyl]sulfonyl]methyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-  
 dihydro-3-pyridinecarboxylate 727382-90-3P, Ethyl  
 2-methyl-6-oxo-5-[2-(2-thienyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-  
 pyridinecarboxylate 727382-92-5P, Ethyl 2-methyl-6-oxo-5-[2-  
 (phenylthiomethyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
 727382-93-6P, Ethyl 5-[2-(2-ethyl-4-pyridinyl)-1,3-thiazol-4-yl]-2-  
 methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727382-94-7P,  
 Ethyl 2-methyl-6-oxo-5-[2-[[[(3-(trifluoromethyl)phenyl)methyl]sulfonyl]me-  
 thy]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
 727382-95-8P, Ethyl 2-methyl-6-oxo-5-[2-(3-thienyl)-1,3-thiazol-4-  
 yl]-1,6-dihydro-3-pyridinecarboxylate 727382-96-9P, Ethyl  
 5-[2-(2H-benzo[d]-1,3-dioxolan-5-yl)-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-  
 dihydro-3-pyridinecarboxylate 727382-97-0P, Ethyl

2-methyl-6-oxo-5-(2-phenyl-1,3-thiazol-4-yl)-1,6-dihydro-3-pyridinecarboxylate 727382-98-1P, Ethyl 2-methyl-6-oxo-5-[2-(4-fluorophenyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727382-99-2P, Ethyl 5-[2-(2,6-dichlorophenyl)-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-00-8P, Ethyl 2-methyl-5-[2-(2-methyl-1,3-thiazol-4-yl)-1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-01-9P, Ethyl 5-[2-[(furan-2-ylmethyl)sulfonyl]methyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-02-0P, Ethyl 5-[2-[(tert-butyl)sulfonyl]methyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-03-1P, Ethyl 2-methyl-6-oxo-5-[2-(3-pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-06-4P, Ethyl 2-methyl-6-oxo-5-[2-(4-methoxyphenyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-07-5P, Ethyl 5-[2-(3,5-dichloropyridin-4-yl)thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-08-6P, Ethyl 5-[2-[(methylsulfonyl)methyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-09-7P, Ethyl 5-[2-[3-[(4-chlorophenyl)sulfonyl]methyl]-2-thienyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-10-0P, Ethyl 2-methyl-6-oxo-5-[2-[2-(1-piperidinyl)-4-pyridinyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-11-1P, Ethyl 2-methyl-5-[2-[2-[(2-methylpropyl)amino]-4-pyridinyl]-1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-12-2P, Ethyl 2-methyl-6-oxo-5-[2-[2-[(3-pyridinylmethyl)amino]-4-pyridinyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-13-3P, Ethyl 2-methyl-6-oxo-5-[2-[2-[(phenylmethyl)amino]-4-pyridinyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-14-4P, Ethyl 2-methyl-6-oxo-5-[2-[2-[2-oxo-3-(trifluoromethyl)-1(2H)-pyridinyl]ethyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-15-5P, Ethyl 5-[2-[2-[(diethylamino)ethyl]amino]-4-pyridinyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate hydrochloride 727383-17-7P, Ethyl 5-[2-[2-[(thien-2-yl)ethyl]amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate hydrochloride 727383-18-8P, Ethyl 5-[2-[2-(4-fluorobenzylamino)pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate hydrochloride 727383-19-9P, Ethyl 5-[2-(2-butylaminopyridin-4-yl)thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate hydrochloride 727383-20-2P, Ethyl 5-[2-[(carbamoylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate hydrochloride 727383-21-3P, Ethyl 5-[2-[2-[(acetylamino)ethylamino]pyridin-4-yl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate hydrochloride 727383-22-4P, N-[2-[(4-[(6-Methyl-2-oxo-1,2-dihydropyridin-3-yl)-1,3-thiazol-2-yl]pyridin-2-yl)amino]ethyl]acetamide 727383-23-5P, N-(Cyclopropylmethyl)-5-[2-[(cyclopropylmethyl)amino]-4-pyridinyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxamide hydrochloride 727383-24-6P, Ethyl 5-[2-[(cyclopropylmethyl)amino]pyridin-4-yl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate hydrochloride 727383-25-7P, Ethyl 5-[2-[2-[(Cyclopentylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate hydrochloride 727383-26-8P, 5-[2-[(4-Methoxybenzyl)amino]pyridin-4-yl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylic acid N-(4-methoxybenzyl)amide hydrochloride 727383-28-0P, Ethyl 2-methyl-6-oxo-5-[2-(2-(amino)-4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-29-1P 727383-31-5P, Ethyl 2-methyl-5-[2-[methyl(phenylsulfonyl)amino]-1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-32-6P 727383-33-7P, Ethyl 2-methyl-5-[2-[methyl(phenylsulfonyl)amino]-1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-pyridinecarboxylate hydrochloride (1/2) 727383-34-8P, 5-[(Phenylmethyl)oxy]-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-2(1H)-pyridinone 727383-35-9P, 6-(Methoxymethyl)-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-2(1H)-pyridinone 727383-37-1P,

5-Phenoxy-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-2(1H)-pyridinone  
 727383-38-2P, 5-Phenoxy-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-2(1H)-  
 Pyridinone hydrochloride (1/3) 727383-39-3P,  
 6-Methyl-3-[2-(4-pyridyl)-1,3-thiazol-4-yl]-1H-pyridin-2-one  
 727383-40-6P, Ethyl 2-(1-methylethyl)-5-[2-(2-methoxy-4-pyridinyl)-  
 1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-pyridinecarboxylate  
 727383-42-8P, Ethyl 2-methyl-5-[2-[2-(methoxy)-4-pyridinyl]-1,3-  
 thiazol-4-yl]-6-oxo-1,6-dihydro-3-pyridinecarboxylate 727383-43-9P  
 , Ethyl 2-methyl-6-oxo-5-[2-[(phenylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-  
 dihydro-3-pyridinecarboxylate 727383-44-0P, Ethyl  
 2-methyl-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-  
 pyridinecarboxylate 727383-45-1P, Ethyl 2-methyl-6-oxo-5-[2-[(2-  
 pyridylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-  
 pyridinecarboxylate 727383-46-2P, Ethyl 2-methyl-5-[2-[1-methyl-  
 1-(phenylsulfonyl)ethyl]-1,3-thiazol-4-yl]-6-oxo-1,6-dihydro-3-  
 pyridinecarboxylate 727383-47-3P, Ethyl 2-cyclopropyl-6-oxo-5-[2-  
 (4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
 727383-51-9P, Ethyl 2-cyclopropyl-6-oxo-5-[2-  
 [(phenylsulfonyl)methyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-  
 pyridinecarboxylate 727383-53-1P, 5-Bromo-6-methyl-3-[2-(4-  
 pyridinyl)-1,3-thiazol-4-yl]-2(1H)-pyridinone 727383-56-4P,  
 Ethyl 2-methyl-5-[2-[2-(methylamino)-4-pyridinyl]-1,3-thiazol-4-yl]-6-oxo-  
 1,6-dihydro-3-pyridinecarboxylate 727383-58-6P,  
 5-Amino-6-ethyl-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-2(1H)-pyridinone  
 727383-65-5P, N-[2-Ethyl-6-oxo-5-[2-(4-pyridyl)-1,3-thiazol-4-yl]-  
 1,6-dihdropyridin-3-yl]acetamide 727383-66-6P,  
 4-Dimethylamino-6-methyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-  
 2-one 727383-68-8P, 6-Methyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-  
 yl]-5,6,7,8-tetrahydro-1H-[1,6]naphthyridin-2-one 727383-69-9P,  
 2-Methyl-6-oxo-N-(2-pyridinylmethyl)-5-[2-[2-[(2-pyridinyl)methyl]amino]-  
 4-pyridinyl]-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxamide  
 727383-70-2P, 6-Methyl-3-[2-[2-[(2-pyridinylmethyl)amino]-4-  
 pyridinyl]-1,3-thiazol-4-yl]-2(1H)-pyridinone 727383-71-3P,  
 Ethyl 2-methyl-6-oxo-5-[2-[2-[(2-pyridinylmethyl)amino]-4-pyridinyl]-1,3-  
 thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-72-4P,  
 Ethyl 2-methyl-6-oxo-5-[2-[2-[(2-phenyloxy)ethyl]amino]-4-pyridinyl]-1,3-  
 thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate 727383-73-5P,  
 5-[2-[2-(Ethoxy)-4-pyridinyl]-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-  
 dihydropyridine-3-carboxylic acid 727383-75-7P, Ethyl  
 5-[2-(2-dimethylaminopyridin-4-yl)-1,3-thiazol-4-yl]-2-isopropyl-6-oxo-1,6-  
 dihydro-3-pyridinecarboxylate 727383-76-8P, Ethyl  
 5-[2-(2-methylaminopyridin-4-yl)-1,3-thiazol-4-yl]-2-isopropyl-6-oxo-1,6-  
 dihydro-3-pyridinecarboxylate hydrochloride 727383-79-1P,  
 2-Methyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-  
 carboxylic acid 727383-81-5P, 6-Methyl-5-[(4-methyl-1-  
 piperazinyl)carbonyl]-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-2(1H)-  
 pyridinone 727383-82-6P, 2-(Pyrrolidin-1-yl)ethyl  
 2-methyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-  
 carboxylate 727383-84-8P, 2-(Pyrrolidin-1-yl)ethyl  
 2-ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-  
 carboxylate 727383-85-9P, 6-Ethyl-3-[2-(pyridin-4-yl)-1,3-  
 thiazol-4-yl]-1H-pyridin-2-one 727383-86-0P,  
 6-Isopropyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one  
 727383-87-1P, 3-(Diethylamino)propyl 2-ethyl-6-oxo-5-[2-(4-  
 pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
 727383-88-2P, 3-(Diethylamino)propyl 2-(1-methylethyl)-6-oxo-5-[2-  
 (4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
 727383-91-7P, 5-[(3,6-Dihydro-2H-pyridin-1-yl)methyl]-6-methyl-3-  
 [2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727383-94-0P  
 , 6-Ethyl-5-[(piperidin-1-yl)methyl]-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-  
 1H-pyridin-2-one hydrochloride 727383-96-2P,  
 6-Ethyl-5-(4-methylpiperazin-1-ylmethyl)-3-[2-(pyridin-4-yl)-1,3-thiazol-4-  
 yl]-1H-pyridin-2-one hydrochloride 727383-97-3P,  
 6-Methyl-3-[4-(pyridin-4-yl)thiazol-2-yl]-1H-pyridin-2-one  
 727383-98-4P, 6-Ethyl-5-isobutylamino-3-[2-(pyridin-4-yl)-1,3-  
 thiazol-4-yl]-1H-pyridin-2-one 727384-01-2P,

N-[2-Ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridin-3-yl]isobutyramide 727384-03-4P, 6-Isopropyl-5-methyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-06-7P, 3-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-6-isopropyl-5-methyl-1H-pyridin-2-one 727384-08-9P, 6-Ethyl-5-propionyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-10-3P, 3-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-6-ethyl-5-propionyl-1H-pyridin-2-one 727384-11-4P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-dimethylaminoethyl ester 727384-13-6P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-(pyrrolidin-1-yl)ethyl ester 727384-14-7P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-(2-oxopyrrolidin-1-yl)ethyl ester 727384-15-8P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-diisopropylaminoethyl ester 727384-16-9P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-diethylaminoethyl ester 727384-17-0P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 1-methylpyrrolidin-3-yl ester 727384-18-1P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 1-ethylpyrrolidin-3-yl ester 727384-19-2P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 1-ethylpiperidin-3-yl ester 727384-20-5P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid piperidin-4-ylmethyl ester 727384-22-7P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-(1-methylpyrrolidin-2-yl)ethyl ester 727384-23-8P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 1-methylpiperidin-3-yl ester 727384-24-9P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-dimethylamino-1-methylethyl ester 727384-25-0P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-diethylamino-1-methylethyl ester 727384-26-1P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-[(benzyl)(methyl)amino]ethyl ester 727384-27-2P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 1-methylpiperidin-4-yl ester 727384-28-3P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-(piperazin-1-yl)ethyl ester 727384-29-4P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-(2-oxopyrrolidin-1-yl)propyl ester 727384-30-7P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid phenethyl ester 727384-32-9P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-(thiophen-2-yl)ethyl ester 727384-33-0P, 5-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid 2-diethylamino-1-methylethyl ester 727384-36-3P, 5-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid 2-diethylamino-1-methylethyl ester 727384-37-4P, 5-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid 2-diethylaminopropyl ester 727384-38-5P, 5-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid 2-(1-methylpyrrolidin-2-yl)ethyl ester 727384-39-6P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-(morpholin-4-yl)ethyl ester 727384-40-9P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid 2-(piperidin-1-yl)ethyl ester 727384-41-0P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid methyl ester 727384-42-1P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid methyl ester trifluoroacetate 727384-43-2P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihdropyridine-3-carboxylic acid propyl ester

727384-44-3P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid propyl ester trifluoroacetate  
 727384-45-4P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid butyl ester 727384-46-5P  
 , 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid butyl ester trifluoroacetate  
 727384-47-6P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid isobutyl ester  
 727384-48-7P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid isobutyl ester trifluoroacetate  
 727384-49-8P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid sec-butyl ester  
 727384-50-1P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid sec-butyl ester trifluoroacetate  
 727384-55-6P, 5-(4,5-Dihydrooxazol-2-yl)-6-isopropyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-56-7P,  
 6-Isopropyl-5-(5-methyl-4,5-dihydrooxazol-2-yl)-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-57-8P,  
 5-[(2-Dimethylaminoethyl)(ethyl)amino]methyl]-6-ethyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-59-0P,  
 5-[(2-Diethylaminoethyl)(methyl)amino]methyl]-6-ethyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-66-9P,  
 6-Oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-2-[2-(pyrrolidin-1-yl)ethyl]-1,6-dihydropyridine-3-carboxylic acid ethyl ester 727384-68-1P,  
 2-Isopropyl-N-(4-methoxybenzyl)-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxamide 727384-69-2P,  
 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid amide 727384-70-5P,  
 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid isobutylamide 727384-72-7P,  
 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid methylamide 727384-73-8P,  
 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid (2-isopropylaminoethyl)amide  
 727384-74-9P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid dimethylamide  
 727384-75-0P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid N-(pyridin-4-ylmethyl)amide  
 727384-76-1P, 2-Isopropyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridine-3-carboxylic acid N-(pyridin-2-ylmethyl)amide  
 727384-78-3P, 5-(Furan-2-yl)-6-isopropyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-83-0P,  
 N-[2-Ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridin-3-yl]-2-methylaminoacetamide 727384-84-1P, 2-Dimethylamino-N-[2-ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridin-3-yl]acetamide 727384-85-2P, N-[2-Ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridin-3-yl]-3-(piperidin-1-yl)propionamide  
 727384-86-3P, N-[2-Ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridin-3-yl]-3-methylbutyramide 727384-87-4P,  
 2-Amino-N-[2-ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridin-3-yl]acetamide 727384-88-5P, 2-tert-Butylamino-N-[2-ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridin-3-yl]acetamide 727384-89-6P, (S)-2-Amino-N-[2-ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridin-3-yl]-3-methylbutyramide 727384-90-9P, N-[2-Ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridin-3-yl]-2-(piperidin-1-yl)acetamide  
 727384-92-1P, N-[2-Ethyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridin-3-yl]-4-(piperidin-1-yl)butyramide  
 727384-93-2P, 5-(1,1-Dioxidoisothiazolidin-2-yl)-6-ethyl-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-2(1H)-pyridinone 727384-94-3P,  
 6-Ethyl-5-(3-methylbutylamino)-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-95-4P, Ethyl 5-[2-[2-[(fur-2-yl)methyl]amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate 727384-96-5P, Ethyl  
 5-[2-[2-[(2-thien-2-yl)ethyl]amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate 727384-97-6P, Ethyl

5-[2-(2-butylaminopyridin-4-yl)thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate 727384-98-7P, Ethyl  
 5-[2-[2-[(carbamoylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate 727384-99-8P, Ethyl  
 5-[2-(2-acetylaminooethylamino)pyridin-4-yl-1,3-thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate 727385-00-4P,  
 5-[2-[2-[(Cyclopropylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylic acid N-(cyclopropylmethyl)amide  
 727385-02-6P, Ethyl 5-[2-[2-[(cyclopropylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-dihydropyridine-3-carboxylate  
 727385-03-7P, Ethyl 5-[2-[2-[(Cyclopentylmethyl)amino]pyridin-4-yl]thiazol-4-yl]-2-methyl-6-dihydropyridine-3-carboxylate  
 727385-04-8P, 5-[2-[2-(4-Methoxybenzylamino)pyridin-4-yl]thiazol-4-yl]-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylic acid  
 4-methoxybenzylamide 727385-05-9P, 6-Methyl-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]hydropyridin-2-one 727385-06-0P, Ethyl  
 5-[2-(2-methylaminopyridin-4-yl)thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihydropyridine-3-carboxylate 727385-07-1P, Ethyl  
 2-methyl-5-[2-[2-[(1-methylethyl)amino]ethyl]amino]-4-pyridinyl]-1,3-thiazol-4-yl]-6-oxo-1,6-dihydropyridine-3-carboxylate 727385-08-2P,  
 , Ethyl 2-isopropyl-6-oxo-5-[2-(4-pyridyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate hydrobromide (3/5)  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Cdk2/Cdk5 inhibitor; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT 141349-86-2

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (Cdk2/cyclin; inhibition; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT 147014-96-8

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (inhibition; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT 19335-57-0P 24922-02-9P 25957-23-7P, 5-Acetyl-2-methyl-6-oxo-1,6-dihydropyridine 31112-96-6P, 2-[2-(Pyridin-4-yl)thiazol-4-yl]acetamide

36674-49-4P, 2-Benzene sulfonyl-2-methylpropionitrile 51145-57-4P, Ethyl 2-acetyl-3-(dimethylamino)prop-2-enoate 51719-12-1P,  
 N-(4-Methoxybenzyl)acetoacetamide 55985-43-8P, 3-Oxobutanoic acid

2-(pyrrolidin-1-yl)ethyl ester 59503-67-2P, Ethyl 5-acetyl-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylate 67354-34-1P, Ethyl  
 3-oxo-4-(phenylmethoxy)butanoate 88301-99-9P, 4-

[(Dimethylamino)methylene]heptane-3,5-dione 89193-23-7P, Ethyl

2-propionyl-3-(dimethylamino)prop-2-enoate 93552-74-0P,

2-[(Dimethylamino)methylene]-3-oxobutanoic acid tert-butyl ester

116344-09-3P, Ethyl 3-(dimethylamino)-2-(2-methylpropanoyl)prop-2-enoate

154020-52-7P, Ethyl 5-acetyl-2-ethyl-6-oxo-1,6-dihydropyridine-3-

carboxylate 154020-53-8P, Ethyl 5-acetyl-2-isopropyl-6-oxo-1,6-

dihydropyridine-3-carboxylate 154020-54-9P, Ethyl 5-acetyl-2-

trifluoromethyl-6-oxo-1,6-dihydro-3-pyridinecarboxylate 247169-71-7P,

3-Acetyl-6-ethyl-5-propionyl-1H-pyridin-2-one 267243-86-7P, Ethyl

2-trifluoroacetyl-3-(dimethylamino)prop-2-enoate 475115-38-9P,

5-Acetyl-2-methyl-6-oxo-1,6-dihydropyridine-3-carboxylic acid tert-butyl ester 475115-40-3P, Ethyl 5-acetyl-2-propyl-6-oxo-1,6-dihydropyridine-3-

carboxylate 578020-10-7P, 2-Amino-1,1-dimethyl-1-(phenylsulfonyl)ethane-2-thione 632365-67-4P, 1-Dimethylamino-2,4-dimethylpent-1-en-3-one

727382-47-0P, Ethyl 5-(2-bromoacetyl)-2-ethyl-6-oxo-1,6-dihydropyridine-3-carboxylate 727382-52-7P, Ethyl 5-(2-bromoacetyl)-2-trifluoromethyl-6-

oxo-1,6-dihydro-3-pyridinecarboxylate 727382-59-4P, Ethyl

5-(2-bromoacetyl)-2-isopropyl-6-oxo-1,6-dihydropyridine-3-carboxylate

727382-63-0P, Ethyl 2-propyl-3-(dimethylamino)prop-2-enoate

727382-64-1P, Ethyl 5-(2-bromoacetyl)-2-propyl-6-oxo-1,6-dihydropyridine-3-carboxylate 727382-68-5P 727382-69-6P, Ethyl 5-acetyl-6-oxo-2-

[(phenylmethoxy)methyl]-1,6-dihydropyridine-3-carboxylate 727382-70-9P,

Ethyl 5-(2-bromoacetyl)-6-oxo-2-[(phenylmethoxy)methyl]-1,6-dihdropyridine-3-carboxylate 727382-73-2P 727382-75-4P,  
 3-[(Dimethylamino)methylene]-2H-5,6-dihdropyran-4-one 727382-77-6P  
 727382-81-2P, Ethyl 4-[(4-methoxyphenyl)methoxy]-3-oxobutanoate  
 727382-82-3P, Ethyl 3-(dimethylamino)-2-[2-[(4-methoxyphenyl)methoxy]acetyl]prop-2-enoate 727382-83-4P, Ethyl  
 5-acetyl-2-[(4-methoxyphenyl)methoxy]methyl]-6-oxo-1,6-dihdropyridine-3-carboxylate 727382-84-5P, Ethyl 5-(2-bromoacetyl)-2-[(4-methoxyphenyl)methoxy]methyl]-6-oxo-1,6-dihdropyridine-3-carboxylate  
 727382-86-7P, 5-(2-Bromoacetyl)-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid ethyl ester 727383-41-7P, 2-Methoxythioisonicotinamide  
 727383-48-4P, 2-(Cyclopolykaryonyl)-3-dimethylaminoacrylic acid ethyl ester 727383-49-5P, Ethyl 5-acetyl-2-cyclopropyl-6-oxo-1,6-dihdropyridine-3-carboxylate 727383-50-8P, Ethyl 5-(2-bromoacetyl)-2-cyclopropyl-6-oxo-1,6-dihdropyridine-3-carboxylate 727383-54-2P,  
 5-Acetyl-3-bromo-2-methyl-6-oxo-1,6-dihdropyridine 727383-59-7P, Ethyl 5-acetyl-2-ethyl-1-(4-methoxybenzyl)-6-oxo-1,6-dihdropyridine-3-carboxylate 727383-60-0P, Ethyl 5-(2-bromoacetyl)-2-ethyl-1-(4-methoxybenzyl)-6-oxo-1,6-dihdropyridine-3-carboxylate  
 727383-61-1P, Ethyl 2-ethyl-1-(4-methoxybenzyl)-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylate  
 727383-62-2P, 2-Ethyl-1-(4-methoxybenzyl)-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihydro-3-pyridinecarboxylic acid  
 727383-63-3P, [2-Ethyl-1-(4-methoxybenzyl)-6-oxo-5-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1,6-dihdropyridin-3-yl] carbamic acid  
 tert-butyl ester 727383-64-4P, 5-Amino-6-ethyl-1-(4-methoxybenzyl)-3-[2-(4-pyridinyl)-1,3-thiazol-4-yl]-1H-pyridin-2-one  
 727383-83-7P, 2-[(Dimethylamino)methylene]-3-Oxobutanoic acid  
 2-(pyrrolidin-1-yl)ethyl ester 727383-90-6P,  
 5-[(Imidazol-1-yl)carbonyl]-6-methyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727383-92-8P, 6-Ethyl-5-hydroxymethyl-1-(4-methoxybenzyl)-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one  
 727383-93-9P, 6-Ethyl-1-(4-methoxybenzyl)-5-[(piperidin-1-yl)methyl]-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one  
 727383-95-1P, 6-Ethyl-1-(4-methoxybenzyl)-5-[(4-methylpiperazin-1-yl)methyl]-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one  
 727384-00-1P, 6-Ethyl-5-isobutylamino-1-(4-methoxybenzyl)-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-02-3P,  
 N-[2-Ethyl-1-(4-methoxybenzyl)-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydro-pyridin-3-yl]isobutyramide 727384-05-6P,  
 3-Acetyl-6-isopropyl-5-methyl-1H-pyridin-2-one 727384-09-0P,  
 3-(2-Bromoacetyl)-6-ethyl-5-propionyl-1H-pyridin-2-one  
 727384-12-5P, 5-[(Imidazol-1-yl)carbonyl]-6-isopropyl-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-21-6P  
 727384-34-1P, 5-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-2-isopropyl-6-oxo-1,6-dihydro-3-pyridinecarboxylic acid 727384-35-2P  
 , 3-[2-(Benzenesulfonylmethyl)thiazol-4-yl]-5-[(imidazol-1-yl)carbonyl]-6-isopropyl-1H-pyridin-2-one 727384-58-9P, 5-[(2-Dimethylaminoethyl)(ethyl)amino]methyl]-6-ethyl-1-(4-methoxybenzyl)-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-60-3P,  
 5-[(2-Diethylaminoethyl)(methyl)amino]methyl]-6-ethyl-1-(4-methoxybenzyl)-3-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1H-pyridin-2-one 727384-62-5P,  
 5-Benzylxy-2-[(dimethylamino)methylene]-3-oxopentanoic acid ethyl ester 727384-63-6P, 5-Acetyl-2-(2-benzylxyethyl)-6-oxo-1,6-dihdropyridine-3-carboxylic acid ethyl ester 727384-79-4P, 3-Acetyl-5-bromo-6-isopropyl-1H-pyridin-2-one 727384-81-8P, 3-Acetyl-5-(furan-2-yl)-6-isopropyl-1H-pyridin-2-one 727384-82-9P, 3-(2-Bromoacetyl)-5-(furan-2-yl)-6-isopropyl-1H-pyridin-2-one  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

IT 60-12-8, 2-Phenylethanol 78-77-3, Isobutyl bromide 78-81-9,  
 Isobutylamine 78-96-6, 2-Hydroxypropylamine 79-30-1, Isobutyryl chloride 96-32-2, Methyl bromoacetate 96-80-0, 2-Diisopropylaminoethanol 98-09-9, Benzenesulfonyl chloride 100-37-8,

2-Diethylaminoethanol 104-79-0, N,N-Diethyl-N'-methylethane-1,2-diamine  
 105-13-5, 4-Methoxybenzyl alcohol 106-52-5, 1-Methylpiperidin-4-ol  
 108-01-0, 2-Dimethylaminoethanol 108-16-7, 1-Dimethylaminopropan-2-ol  
 109-01-3, 1-Methylpiperazine 110-86-1, Pyridine, reactions 110-89-4,  
 Piperidine, reactions 123-75-1, Pyrrolidine, reactions 123-83-1,  
 N'-Ethyl-N,N-dimethylethane-1,2-diamine 140-75-0, 4-Fluorobenzylamine  
 141-97-9, Ethyl acetoacetate 372-31-6, Ethyl 4,4,4-trifluoroacetoacetate  
 503-74-2, 3-Methylbutyric acid 530-62-1 536-33-4 565-69-5,  
 2-Methylpentan-3-one 609-15-4, Ethyl 2-chloroacetoacetate 617-89-0,  
 [(Furan-2-yl)methyl]amine 622-40-2, 2-(Morpholin-4-yl)ethanol  
 622-93-5, 3-Diethylaminopropan-1-ol 765-43-5, Cyclopropyl methyl ketone  
 1001-53-2, N-(2-Aminoethyl)acetamide 1118-68-9, Dimethylaminoacetic acid  
 1190-91-6, 4-(Dimethylamino)but-3-en-2-one 1445-73-4,  
 1-Methyl-4-piperidone 1633-82-5, 3-Chloropropane-1-sulfonyl chloride  
 1758-46-9, 2-Phenoxyethylamine 1918-13-4, 2,6-Dichlorothiobenzamide  
 2196-13-6, Isothionicotinamide 2227-79-4, Thiobenzamide 2393-23-9,  
 4-Methoxybenzylamine 2516-47-4, (Cyclopropylmethyl)amine 2802-08-6,  
 trans-4-(Dimethylamino)-3-buten-2-one 2955-88-6, 1-(2-  
 Hydroxyethyl)pyrrolidine 3040-44-6, 2-(Piperidin-1-yl)ethanol  
 3235-67-4, Piperidin-1-ylacetic acid 3249-68-1, Ethyl butyrylacetate  
 3445-11-2, 2-(2-Oxopyrrolidin-1-yl)ethanol 3554-74-3,  
 1-Methylpiperidin-3-ol 3731-51-9, 2-Aminomethylpyridine 3731-52-0,  
 (3-Pyridylmethyl)amine 3731-53-1, (Pyridin-4-ylmethyl)amine 4241-27-4,  
 3-Cyano-6-methyl-2(1H)-pyridinone 4402-32-8, 1-Diethylaminopropan-2-ol  
 4637-24-5 4672-16-6, 4-(Piperidin-1-yl)butyric acid 4949-44-4, Ethyl  
 propionylacetate 5349-17-7, 4-(Bromoacetyl)pyridine hydrobromide  
 5402-55-1, 2-(Thiophen-2-yl)ethanol 5977-14-0, Acetoacetamide  
 6053-81-2, (Cyclopentylmethyl)amine 7152-15-0, Ethyl isobutyrylacetate  
 7424-54-6, Heptane-3,5-dione 7605-28-9, 2-(Phenylsulfonyl)acetonitrile  
 13220-33-2, 1-Methylpyrrolidin-3-ol 13331-23-2, (2-Furanyl)boronic acid  
 13444-24-1, 1-Ethylpiperidin-3-ol 13734-36-6, [(tert-  
 Butoxycarbonyl)methyl]amino]acetic acid 13734-41-3 15884-65-8,  
 Benzodioxole-5-carbothioic acid amide 19099-93-5, Benzyl  
 4-oxo-1-piperidinecarboxylate 19522-67-9, 2-Isopropylaminoethylatione  
 22179-72-2, 4-Fluorothiobenzamide 24044-76-6, 3-Thiophenecarbothioamide  
 26371-07-3, 3-(Piperidin-1-yl)propionic acid 29943-42-8,  
 Tetrahydro-4H-pyran-4-one 30433-91-1, [2-(Thiophen-2-yl)ethyl]amine  
 30727-14-1, 1-Ethylpyrrolidin-3-ol 32807-28-6, Methyl  
 4-chloroacetoacetate 33252-30-1, 2-Chloro-4-cyanopyridine 41361-28-8,  
 1-Ethyl-3-piperidone hydrochloride 51451-44-6, 2-(3-  
 Pyridinyl)thioacetamide 51731-17-0, trans-4-Methoxy-3-buten-2-one  
 53300-47-3, 2-Methylsulfonylthioacetamide 54334-57-5,  
 2-(Phenylsulfonyl)ethanethioamide 58482-93-2 59865-82-6,  
 2-Phenylsulfanylthioacetamide 59865-87-1, 2-(4-  
 Chlorobenzenesulfonyl)thioacetamide 60759-02-6, 4-  
 Methoxyphenylthioacetamide 62012-15-1, 3-(2-Oxopyrrolidin-1-yl)propanol  
 64714-79-0, 5-Benzylxy-3-oxopentanoic acid ethyl ester 66521-58-2  
 67004-64-2, 2-(1-Methylpyrrolidin-2-yl)ethanol 72716-86-0,  
 2-Methoxy-4-isonicotinonitrile 74093-60-0, 3-(Dimethylamino)-2-  
 phenoxyprop-2-enal 77279-24-4, 4-(2-Hydroxyethyl)piperazine-1-carboxylic  
 acid tert-butyl ester 79099-07-3, tert-Butyl 4-oxo-1-  
 piperidinecarboxylate 80882-52-6, 2-Dimethylamino-4-isonicotinonitrile  
 91447-89-1, 2-Chloroisothionicotinamide 92303-09-8 123855-51-6,  
 4-Hydroxymethylpiperidine-1-carboxylic acid tert-butyl ester  
 137225-13-9, 2-Methylamino-4-isonicotinonitrile 143462-35-5,  
 3-(Dimethylamino)-2-(phenylmethoxy)prop-2-enal 174223-29-1,  
 2-Methylthiazole-4-carbothioic acid amide 175202-34-3,  
 2-(2-Thienylsulfonyl)ethanethioamide 175202-41-2, 2-(Furan-2-  
 ylmethanesulfonyl)thioacetamide 175204-46-3, 2,6-  
 Dichloroisothionicontinamide 175276-83-2 175276-88-7,  
 2-[(4-Fluorophenylmethyl)sulfonyl]thioacetamide 175276-91-2,  
 2-(2-Pyridylsulfonyl)ethanethioamide 175277-31-3, 2-(tert-  
 Butylsulfonyl)thioacetamide 254982-01-9, 3-[(4-  
 Chlorobenzenesulfonyl)methyl]thiophene-2-carbothioic acid amide  
 265314-18-9, 3-(2-Oxo-3-trifluoromethyl-2H-pyridin-1-yl)thiopropionamide  
 727382-54-9 727382-91-4, 2-Thienylthioamide 727383-36-0,

4-(Dimethylamino)-1-methoxybut-3-en-2-one 727383-55-3,  
 5-(2-Bromoacetyl)-3-bromo-2-methyl-6-oxo-1,6-dihdropyridine 727383-57-5  
 727383-67-7 727383-74-6, 5-[2-(2-Chloropyridin-4-yl)thiazol-4-  
 yl]-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid 727383-78-0,  
 5-(2-Bromoacetyl)-2-methyl-6-oxo-1,6-dihdropyridine-3-carboxylic acid  
 tert-butyl ester 727383-99-5, Ethyl (2Z)-2-propionyl-3-  
 (dimethylamino)prop-2-enoate 727384-07-8, 3-(2-Bromoacetyl)-6-isopropyl-  
 5-methyl-1H-pyridin-2-one 727384-64-7, 2-(2-Benzylxyethyl)-5-(2-  
 bromoacetyl)-6-oxo-1,6-dihdropyridine-3-carboxylic acid ethyl ester  
 727384-67-0 727384-80-7, 3-Acetyl-6-isopropyl-1H-pyridin-2-one  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for  
 treatment of cell proliferation-related disorders)

IT 634250-92-3 634250-93-4 634250-94-5, 3: PN: WO03101985 SEQID: 3  
 unclaimed DNA 634250-95-6 634250-96-7 634250-97-8 634250-98-9  
 634250-99-0 634251-00-6 634251-01-7 634251-02-8 634251-03-9  
 RL: PRP (Properties)  
 (unclaimed nucleotide sequence; preparation of quinazolines as Cdk2 and Cdk5  
 kinase inhibitors for treatment of cell proliferation-related  
 disorders)

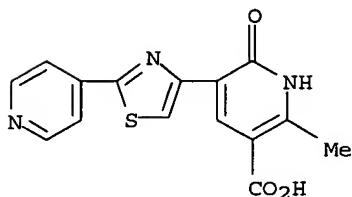
IT 727383-80-4P, 2-Methyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-  
 1,6-dihdropyridine-3-carboxylic acid trifluoroacetate  
 RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical  
 process); PYP (Physical process); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC  
 (Process); USES (Uses)  
 (Cdk2/Cdk5 inhibitor; preparation of quinazolines as Cdk2 and Cdk5 kinase  
 inhibitors for treatment of cell proliferation-related disorders)

RN 727383-80-4 HCAPLUS

CN 3-Pyridinecarboxylic acid, 1,6-dihydro-2-methyl-6-oxo-5-[2-(4-pyridinyl)-4-  
 thiazolyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

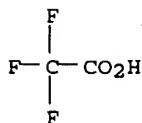
CM 1

CRN 727383-79-1  
 CMF C15 H11 N3 O3 S



CM 2

CRN 76-05-1  
 CMF C2 H F3 O2



L42 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2003:633706 HCAPLUS  
 DN 139:180057

ED Entered STN: 15 Aug 2003  
 TI Preparation of thiazolyl substituted quinolinones for treating cell proliferative disorders, neurological disorders and apoptosis

IN Norman, Mark; Wang, Hui-ling; Rzasa, Robert;  
 Zhong, Wenge; Nguyen, Thomas; Kaller, Matthew  
 PA Amgen Inc., USA  
 SO PCT Int. Appl., 490 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07D417-00

CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 1, 63

FAN.CNT 1

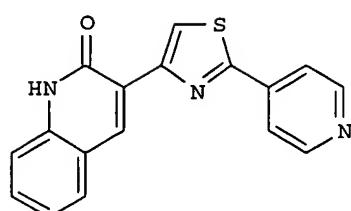
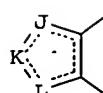
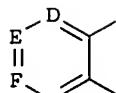
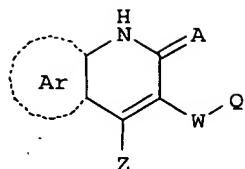
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003066630	A2	20030814	WO 2003-US3762	20030207
	WO 2003066630	A3	20031218		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 6822097	B1	20041123	US 2003-360226	20030206
	CA 2475637	AA	20030814	CA 2003-2475637	20030207
	EP 1478645	A2	20041124	EP 2003-707786	20030207
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRAI	US 2002-355313P	P	20020207		
	US 2003-360226	A1	20030206		
	WO 2003-US3762	W	20030207		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2003066630	ICM	C07D417-00
	WO 2003066630	ECLA	C07D417/14+277B+215+213; C07D417/14+277B+215; C07D417/14+277B+215+207; C07D417/14+277B+239B+215+213; C07D417/14+277B+241B+215; C07D417/14+277B+277B+215; C07D417/14+277B+215+209C; C07D417/14+277B+215+213+207; C07D417/14+277B+231+215; C07D417/14+277B+261+215; C07D417/14+277B+233+215; C07D417/14+285B+277B+215; C07D417/14+307+277B+215; C07D417/14+307B+277B+215; C07D417/14+307B+277B+215+213; C07D417/14+319+277B+215; C07D417/14+333B+277B+215; C07D417/14+333B+307B+277B+215; C07D417/14R+307B+277B+215; C07D471/04+221B+221B+2; C07D471/04+239B+221B; C07D491/04+317A+221A; C07D513/04+277B+221B
US 6822097		NCL	546/153.000; 546/155.000; 546/157.000; 546/158.000
		ECLA	C07D417/14+277B+215; C07D417/14+277B+215+207; C07D417/14+277B+215+209C; C07D417/14+277B+215+213; C07D417/14+277B+215+213+207; C07D417/14+277B+231+215; C07D417/14+277B+233+215; C07D417/14+277B+239B+215+213; C07D417/14+277B+241B+215; C07D417/14+277B+261+215; C07D417/14+277B+277B+215; C07D417/14+285B+277B+215; C07D417/14+307+277B+215; C07D417/14+307B+277B+215; C07D417/14+307B+277B+215+213; C07D417/14+319+277B+215; C07D417/14+333B+277B+215; C07D417/14+333B+307B+277B+215; C07D417/14R+307B+277B+215; C07D471/04+221B+221B+2; C07D471/04+239B+221B; C07D491/04+317A+221A; C07D513/04+277B+221B

OS MARPAT 139:180057

GI



AB The title compds. [I; Ar = II or III; A = O, S, NH; D = CR1, N; E = CR2, N; F = CR3, N; G = CR4, N; J = NR6, S, O, CR1; K = NR6, S, O, CR2; L = NR6, S, O, CR3; Q = OH, (un)substituted NH, aryl, etc.; W = (un)substituted monocyclic (non)aromatic heterocyclic ring; Z = H, (un)substituted NH2, SH, OH, etc.; R1-R4 = H, halo, aryl, etc.; R6 = H, alkyl, a lone pair electrons] and their pharmaceutically acceptable salts, useful for prophylaxis and treatment of diseases and other maladies or conditions involving stroke, cancer and the like, were prepared E.g., a 4-step synthesis of IV (starting from thioisonicotinamide and Me 4-chloroacetoacetate) which showed IC50 of < 1  $\mu$ M against cdk2/cyclin kinase and against cdk5/p25, was given. A pharmaceutical composition comprising compound I was claimed.

ST thiazolyl quinolinone prepn cell proliferation inhibitor antitumor apoptosis; tyrosine kinase inhibitor cdk2 cyclin cdk5 thiazolyl quinolinone prepn

IT Antitumor agents

Apoptosis

Cell proliferation

Cytotoxic agents

Human

Neoplasm

Nervous system, disease

Nervous system agents

(preparation of thiazolyl substituted quinolinones for treating cell proliferative disorders, neurol. disorders and apoptosis)

IT Brain, disease

(stroke; preparation of thiazolyl substituted quinolinones for treating cell proliferative disorders, neurol. disorders and apoptosis)

IT 147014-96-8, Cdk5 kinase

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(His-tagged p25/CDK5; preparation of thiazolyl substituted quinolinones for treating cell proliferative disorders, neurol. disorders and apoptosis)

IT 146279-89-2, Cyclin e/cdk2 kinase

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(cyclin E2/CDK2; preparation of thiazolyl substituted quinolinones for treating cell proliferative disorders, neurol. disorders and apoptosis)

IT 578017-64-8P 578017-68-2P 578017-70-6P

578017-96-6P 578018-16-3P 578018-20-9P 578018-25-4P

578018-29-8P 578018-34-5P 578018-44-7P 578018-57-2P

578018-62-9P 578018-82-3P 578018-85-6P 578018-94-7P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (preparation of thiazolyl substituted quinolinones for treating cell proliferative disorders, neurol. disorders and apoptosis)

IT 209974-99-2P 578017-57-9P 578017-58-0P  
 578017-59-1P 578017-60-4P 578017-61-5P  
 578017-62-6P 578017-63-7P 578017-65-9P  
 578017-66-0P 578017-67-1P 578017-69-3P  
 578017-71-7P 578017-72-8P 578017-73-9P  
 578017-74-0P 578017-75-1P 578017-76-2P  
 578017-77-3P 578017-78-4P 578017-79-5P  
 578017-80-8P 578017-81-9P 578017-82-0P  
 578017-83-1P 578017-84-2P 578017-85-3P 578017-87-5P  
 578017-89-7P 578017-90-0P 578017-92-2P 578017-94-4P 578017-95-5P  
 578017-97-7P 578017-98-8P 578017-99-9P 578018-00-5P  
 578018-01-6P 578018-02-7P 578018-03-8P 578018-04-9P  
 578018-05-0P 578018-06-1P 578018-07-2P 578018-08-3P  
 578018-09-4P 578018-10-7P 578018-11-8P 578018-12-9P 578018-13-0P  
 578018-14-1P 578018-15-2P 578018-17-4P 578018-18-5P 578018-19-6P  
 578018-21-0P 578018-22-1P 578018-23-2P 578018-24-3P 578018-26-5P  
 578018-27-6P 578018-28-7P 578018-30-1P 578018-31-2P 578018-32-3P  
 578018-33-4P 578018-35-6P 578018-36-7P 578018-37-8P 578018-38-9P  
 578018-39-0P 578018-40-3P 578018-41-4P 578018-42-5P  
 578018-43-6P 578018-45-8P 578018-46-9P  
 578018-47-0P 578018-48-1P 578018-49-2P  
 578018-50-5P 578018-51-6P 578018-52-7P  
 578018-53-8P 578018-54-9P 578018-55-0P  
 578018-56-1P 578018-58-3P 578018-59-4P 578018-60-7P  
 578018-61-8P 578018-63-0P 578018-64-1P 578018-65-2P  
 578018-66-3P 578018-67-4P 578018-68-5P  
 578018-69-6P 578018-70-9P 578018-71-0P 578018-72-1P  
 578018-73-2P 578018-74-3P 578018-75-4P 578018-76-5P 578018-77-6P  
 578018-78-7P 578018-79-8P 578018-80-1P 578018-81-2P  
 578018-83-4P 578018-84-5P 578018-86-7P 578018-87-8P  
 578018-88-9P 578018-89-0P 578018-90-3P 578018-91-4P 578018-92-5P  
 578018-93-6P 578018-95-8P 578018-96-9P 578018-97-0P  
 578018-98-1P 578018-99-2P 578019-00-8P 578019-01-9P 578019-02-0P  
 578019-03-1P 578019-04-2P 578019-05-3P 578019-06-4P  
 578019-07-5P 578019-08-6P 578019-09-7P 578019-10-0P  
 578019-11-1P 578019-12-2P 578019-13-3P 578019-14-4P  
 578019-15-5P 578019-16-6P 578019-17-7P  
 578019-18-8P 578019-19-9P 578019-20-2P  
 578019-21-3P 578019-22-4P 578019-23-5P 578019-24-6P 578019-25-7P  
 578019-26-8P 578019-27-9P 578019-28-0P  
 578019-29-1P 578019-30-4P 578019-31-5P  
 578019-32-6P 578019-33-7P 578019-34-8P  
 578019-35-9P 578019-36-0P 578019-37-1P  
 578019-38-2P 578019-39-3P 578019-40-6P  
 578019-41-7P 578019-42-8P 578019-43-9P  
 578019-44-0P 578019-45-1P 578019-46-2P  
 578019-47-3P 578019-48-4P 578019-49-5P 578019-50-8P  
 578019-51-9P 578019-52-0P 578019-53-1P  
 578019-54-2P 578019-55-3P 578019-56-4P  
 578019-57-5P 578019-58-6P 578019-59-7P  
 578019-60-0P 578020-21-0P 578020-22-1P 578020-23-2P  
 578020-24-3P 578020-25-4P 578020-26-5P 578020-27-6P  
 578020-28-7P 578710-19-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thiazolyl substituted quinolinones for treating cell proliferative disorders, neurol. disorders and apoptosis)

IT 75-31-0, Isopropylamine, reactions 78-81-9, Isobutylamine 98-09-9, Benzenesulfonyl chloride 98-58-8, 4-Bromobenzenesulfonyl chloride 98-88-4, Benzoyl chloride 103-80-0, Phenylacetyl chloride 104-79-0,

N,N-Diethyl-N'-methylethane-1,2-diamine 105-56-6, Ethyl cyanoacetate  
 106-95-6, Allyl bromide, reactions 109-01-3, 1-Methylpiperazine  
 109-89-7, Diethylamine, reactions 110-72-5, N-Ethylethane-1,2-diamine  
 110-89-4, Piperidine, reactions 110-91-8, Morpholine, reactions  
 123-75-1, Pyrrolidine, reactions 123-83-1, N'-Ethyl-N,N-dimethylethane-  
 1,2-diamine 134-20-3, Methyl anthranilate 141-91-3,  
 2,6-Dimethylmorpholine 141-97-9, Ethyl acetoacetate 142-25-6,  
 N,N,N'-Trimethylethylenediamine 156-87-6, 3-Hydroxypropyl-1-amine  
 320-94-5, 4-(Trifluoromethyl)-2-nitrobenzoic acid 503-29-7, Azetidine  
 529-23-7, 2-Aminobenzaldehyde 536-33-4, Ethionamide 613-89-8,  
 2-Aminoacetophenone 626-56-2, 3-Methylpiperidine 656-32-6,  
 2-Fluorophenyl thiourea 674-82-8, Diketene 701-27-9,  
 3-Fluorobenzenesulfonyl chloride 1003-03-8, Cyclopentylamine  
 1885-29-6, 2-Aminobenzonitrile 2196-13-6, Thioisonicotinamide  
 2227-64-7 2439-57-8, N-Methyl-tetrahydrofurfurylamine 2835-77-0,  
 2-Aminobenzophenone 4104-75-0, N-Methyl-N-phenylthiourea 4421-09-4,  
 2H-Benzo[d]1,3-dioxolane-5-carbonitrile 4621-66-3, Thionicotinamide  
 4747-21-1, N-Isopropyl-N-methylamine 5000-65-7 5349-17-7,  
 4-(Bromoacetyl)pyridine hydrobromide 5382-16-1, 4-Hydroxypiperidine  
 5407-04-5 5909-24-0 5922-60-1, 2-Amino-5-chlorobenzonitrile  
 6859-99-0, 3-Hydroxypiperidine 7605-28-9, 2-(Phenylsulfonyl)acetonitrile  
 13514-93-7, 2-Amino-5-(1-piperidinyl)benzonitrile 14294-09-8,  
 1-Piperidinecarbothioamide 14294-11-2, 2-Pyridyl thiourea 15861-24-2,  
 5-Cyanoindole 15884-65-8, 1,3-Benzodioxole-5-carbothioamide  
 16369-05-4, 2-Amino-3-methylbutan-1-ol 20028-53-9, 5-Chloro-2-  
 aminobenzaldehyde 20099-89-2, 4-(2-Bromoacetyl)benzonitrile  
 22179-72-2, 4-Fluorothiobenzamide 26961-27-3, 2-Amino-4,5-  
 dimethoxybenzonitrile 27578-60-5, 1-(2-Aminoethyl)piperidine  
 28857-37-6 29676-71-9, (2-Amino-4-thiazolyl)acetic acid 30162-37-9,  
 3-Pyridyl thiourea 32807-28-6, Methyl 4-chloroacetoacetate 33252-30-1,  
 2-Chloropyridine-4-carbonitrile 35092-89-8 35794-11-7,  
 3,5-Dimethylpiperidine 38943-98-5, 2-Amino-5-(4-methyl-1-  
 piperazinyl)benzonitrile 40499-83-0, 3-Hydroxypyrrolidine 52711-92-9,  
 (2,5-Dimethoxyphenyl)acetyl chloride 54334-57-5 56541-07-2  
 59865-82-6, 2-(Phenylthio)thioacetamide 59865-87-1, 2-(4-  
 Chlorophenylsulfonyl)ethanethioamide 82420-35-7, 5-Fluoro-2-nitrobenzyl  
 bromide 94108-56-2, 4-(Trifluoromethoxy)benzenesulfonyl chloride  
 98475-07-1, Methyl 2-bromomethyl-3-nitrobenzoate 104777-39-1  
 122641-10-5 137049-00-4, 1-Methyl-1H-imidazole-4-sulfonyl chloride  
 143090-18-0 164670-44-4, 4-Pyridyl thiourea 175202-34-3 175205-52-4,  
 4-(1,2,3-Thidiazol-4-yl)thiobenzamide 175277-49-3 175277-57-3  
 175277-59-5 478366-48-2 578020-16-3, 4-Trifluoromethyl-2-nitrobenzyl  
 iodide 578020-17-4 578020-18-5 578020-19-6 578020-20-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of thiazolyl substituted quinolinones for treating cell  
 proliferative disorders, neurol. disorders and apoptosis)

IT 31112-90-0P 31112-92-2P 36674-49-4P, 2-(Phenylsulfonyl)-2-  
 methylpropionitrile 36926-82-6P 39067-04-4P 50290-20-5P  
 82379-38-2P, 4-Hydroxymethyl-3-nitrobenzoic acid 89950-93-6P,  
 4-Hydroxymethyl-3-nitrobenzoic acid methyl ester 135964-75-9P  
 145736-67-0P 145736-75-0P 186602-93-7P 212322-17-3P,  
 3-Amino-4-formylbenzoic acid methyl ester 578019-61-1P 578019-62-2P  
 578019-64-4P 578019-66-6P 578019-67-7P 578019-68-8P 578019-69-9P  
 578019-70-2P 578019-71-3P 578019-72-4P 578019-73-5P 578019-74-6P  
 578019-75-7P 578019-76-8P 578019-77-9P 578019-78-0P 578019-79-1P  
 578019-80-4P 578019-81-5P 578019-83-7P 578019-85-9P 578019-86-0P  
 578019-87-1P 578019-88-2P 578019-89-3P 578019-90-6P 578019-91-7P  
 578019-92-8P 578019-93-9P 578019-94-0P 578019-95-1P 578019-96-2P  
 578019-97-3P 578019-98-4P 578019-99-5P 578020-00-5P 578020-01-6P  
 578020-02-7P 578020-03-8P 578020-04-9P 578020-05-0P,  
 3-Amino-4-hydroxymethylbenzoic acid methyl ester 578020-06-1P  
 578020-07-2P 578020-08-3P 578020-09-4P 578020-10-7P,  
 2-Amino-1,1-dimethyl-1-(phenylsulfonyl)ethane-2-thione 578020-11-8P  
 578020-12-9P 578020-13-0P 578020-14-1P  
 578020-15-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)  
 (preparation of thiazolyl substituted quinolinones for treating cell proliferative disorders, neurol. disorders and apoptosis)

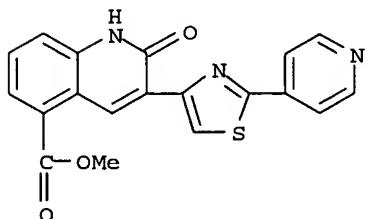
IT 579545-89-4 579545-90-7 579545-91-8 579545-92-9 579545-93-0  
 579545-94-1 579545-95-2 579545-96-3 579545-97-4 579545-98-5  
 579545-99-6 579546-00-2

RL: PRP (Properties)  
 (unclaimed sequence; preparation of thiazolyl substituted quinolinones for treating cell proliferative disorders, neurol. disorders and apoptosis)

IT 578017-64-8P  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (preparation of thiazolyl substituted quinolinones for treating cell proliferative disorders, neurol. disorders and apoptosis)

RN 578017-64-8 HCPLUS

CN 5-Quinolincarboxylic acid, 1,2-dihydro-2-oxo-3-[2-(4-pyridinyl)-4-thiazolyl]-, methyl ester (9CI) (CA INDEX NAME)



=> d all hitstr 153 tot

L53 ANSWER 1 OF 11 HCPLUS COPYRIGHT 2005 ACS on STN  
 AN 2004:214107 HCPLUS  
 DN 140:417245  
 ED Entered STN: 18 Mar 2004  
 TI Tricyclic pyridones as functionally selective human GABA $\alpha$ 2/3 receptor-ion channel ligands  
 AU Crawforth, James; Atack, John R.; Cook, Susan M.; Gibson, Karl R.; Nadin, Alan; Owens, Andrew P.; Pike, Andrew; Rowley, Michael; Smith, Alison J.; Sohal, Bindu; Sternfeld, Francine; Wafford, Keith; Street, Leslie J.  
 CS Department of Medicinal Chemistry, The Neuroscience Research Centre, Merck Sharp & Dohme Research Laboratories, Essex, CM20 2QR, UK  
 SO Bioorganic & Medicinal Chemistry Letters (2004), 14(7), 1679-1682  
 CODEN: BMCL8; ISSN: 0960-894X  
 PB Elsevier Science B.V.  
 DT Journal  
 LA English  
 CC 1-3 (Pharmacology)  
 AB A series of tricyclic pyridones has been evaluated as benzodiazepine site ligands with functional selectivity for the  $\alpha$ 3 over the  $\alpha$ 1 containing subtype of the human GABA $A$  receptor ion channel. This investigation led to the identification of a high affinity, functionally selective, orally bioavailable benzodiazepine site ligand that demonstrated activity in rodent anxiolysis models and reduced sedation relative to diazepam.  
 ST structure activity tricyclic pyridone GABA $A$  receptor anxiolytic sedation  
 IT GABA receptors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (GABA $A$ ,  $\alpha$ 2/3; tricyclic pyridones as functionally selective human GABA $\alpha$ 2/3 receptor-ion channel ligands)  
 IT Mental activity  
 (sedation; tricyclic pyridones as functionally selective human

GABA $\alpha$ 2/3 receptor-ion channel ligands)

IT Anxiolytics  
Human  
Structure-activity relationship  
(tricyclic pyridones as functionally selective human GABA $\alpha$ 2/3 receptor-ion channel ligands)

IT 216012-61-2P 380830-41-1P 489466-63-9P 691387-10-7P 691387-13-0P  
691387-15-2P 691387-17-4P 691387-18-5P 691387-19-6P 691387-20-9P  
691387-21-0P 691387-22-1P 691387-23-2P 691387-24-3P 691387-25-4P  
691387-26-5P 691387-27-6P 691387-28-7P 691387-29-8P  
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(tricyclic pyridones as functionally selective human GABA $\alpha$ 2/3 receptor-ion channel ligands)

IT 75-21-8, Oxirane, reactions 288-32-4, 1H-Imidazole, reactions 3430-22-6 18162-48-6 143462-35-5 173739-73-6 216012-95-2  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(tricyclic pyridones as functionally selective human GABA $\alpha$ 2/3 receptor-ion channel ligands)

IT 216011-87-9P 216012-32-7P 380830-45-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(tricyclic pyridones as functionally selective human GABA $\alpha$ 2/3 receptor-ion channel ligands)

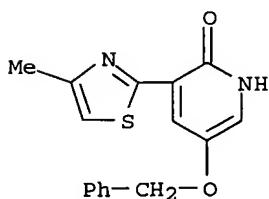
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Collins, I; J Med Chem 2002, V45, P1887 HCPLUS  
(2) Collinson, N; Psychopharmacology 1997, V132, P751  
(3) Crawforth, J; US 20010053776 2001 HCPLUS  
(4) Gibson, K; J Org Chem 2002, V67, P9354 HCPLUS  
(5) Harrison, T; WO 9850384 1998 HCPLUS  
(6) Korpi, E; Ann Med 1997, V29, P275 HCPLUS  
(7) Krapcho, P; Tetrahedron Lett 1973, V14, P957  
(8) Liu, H; Tetrahedron Lett 1995, V36, P8917 HCPLUS  
(9) Low, K; Science 2000, V290, P131 HCPLUS  
(10) McKernan, R; Nature Neuroscience 2000, V3, P587 HCPLUS  
(11) Mink, K; Liebigs Ann 1995, P645  
(12) Nadin, A; Tetrahedron Lett 1999, V40, P4073 HCPLUS  
(13) Sieghart, W; Neurochem Int 1999, V34, P379 HCPLUS  
(14) Smith, A; Mol Pharmacol 2001, V59, P1108 HCPLUS  
(15) Whiting, P; J Neuroscience 1997, V17, P5027 HCPLUS

IT 216011-87-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(tricyclic pyridones as functionally selective human GABA $\alpha$ 2/3 receptor-ion channel ligands)

RN 216011-87-9 HCPLUS  
CN 2(1H)-Pyridinone, 3-(4-methyl-2-thiazolyl)-5-(phenylmethoxy)- (9CI) (CA INDEX NAME)



L53 ANSWER 2 OF 11 HCPLUS COPYRIGHT 2005 ACS on STN  
AN 2003:261823 HCPLUS  
DN 138:287663

ED Entered STN: 04 Apr 2003  
 TI Preparation of 3-pyridyl or 4-isoquinolinyl thiazoles as C17,20 lyase inhibitors  
 IN Bierer, Donald; McClure, Andrea; Fu, Wenlang; Achebe, Furahi; Ladouceur, Gaetan H.; Burke, Michael J.; Bi, Cheng; Hart, Barry; Dumas, Jacques; Sibley, Robert; Scott, William J.; Johnson, Jeffrey; Asgari, Davoud  
 PA Bayer Corporation, USA  
 SO PCT Int. Appl., 194 pp.  
 CODEN: PIIXD2

DT Patent

LA English

IC ICM C07D277-00

CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 1, 2

FAN.CNT 8

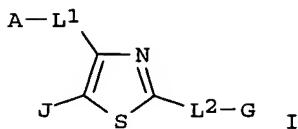
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003027085	A2	20030403	WO 2002-US30483	20020926 <--
	WO 2003027085	A3	20031204		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2461360	AA	20030403	CA 2002-2461360	20020926 <--
	EP 1432706	A2	20040630	EP 2002-799636	20020926 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	US 2004267017	A1	20041230	US 2004-490822	20040326 <--
PRAI	US 2001-324993P	P	20010926 <--		
	WO 2002-US30483	W	20020926 <--		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2003027085	ICM	C07D277-00
	WO 2003027085	ECLA	C07D401/14+233+213+213; C07D413/04+263B+213; C07D413/14+317+263B+213; C07D417/04+277+213; C07D417/04+277+217; C07D417/04+277B+213; C07D417/04+277B+217; C07D417/04+277B+241B; C07D417/06+277B+213; C07D417/14+277B+213+207; C07D417/14+277B+213+213; C07D417/14+277B+215+213; C07D417/14+277B+217+213; C07D417/14+277B+233+213; C07D417/14+277B+241B+213; C07D417/14+277B+261+213; C07D417/14+285B+277B+213; C07D417/14+307+277B+213; C07D417/14+307B+277B+213; C07D417/14+319+277B+213; C07D417/14+321+277B+213; C07D417/14+333B+277B+213; C07D513/04+277A+271A; C07D513/04+277B+209B; C07D513/04+277B+221B; C07D513/04+277B+239B <--
	US 2004267017	NCL	544/370.000; 548/322.500
		ECLA	C07D401/14+233+213+213; C07D413/04+263B+213; C07D413/14+317+263B+213; C07D417/04+277+213; C07D417/04+277+217; C07D417/04+277B+213; C07D417/04+277B+217; C07D417/04+277B+241B; C07D417/06+277B+213; C07D417/14+277B+213+207; C07D417/14+277B+213+213; C07D417/14+277B+215+213; C07D417/14+277B+217+213; C07D417/14+277B+233+213; C07D417/14+277B+241B+213; C07D417/14+277B+261+213; C07D417/14+285B+277B+213; C07D417/14+307+277B+213; C07D417/14+307B+277B+213; C07D417/14+319+277B+213; C07D417/14+321+277B+213; C07D417/14+333B+277B+213; C07D513/04+277A+271A; C07D513/04+277B+209B;

OS MARPAT 138:287663  
GI

C07D513/04+277B+221B; C07D513/04+277B+239B <--



AB The title compds. [I; L1 = a bond, CO, (CH<sub>2</sub>)<sub>a</sub> (wherein a = 1-3), etc.; L2 = a bond, (CH<sub>2</sub>)<sub>a</sub>, CH<sub>2</sub>O, etc.; J = H, alkyl, halo; when L1 = a bond, then A = (un)substituted pyridyl, pyridyl oxide, Ph, etc.; when L2 = a bond, then G = (un)substituted pyridyl, pyridyl oxide, etc.; when L1 = CO, then A = piperidino, morpholino, (un)substituted piperazino; when L1 = (CH<sub>2</sub>)<sub>a</sub>, then A = imidazol-1-yl, (in)substituted Ph; etc.], useful as inhibitors of lyases, e.g., the 17 $\alpha$ -hydroxylase-C17,20 enzyme, for treating prostate cancer or breast cancer, were prepared. Thus, refluxing 4-methylpyridine-3-thiocarboxamide with 4-chlorophenacyl bromide in EtOH afforded 88% I.HBr [L1, L2 = a bond; G = 4-methylpyrid-3-yl; A = 4-ClC<sub>6</sub>H<sub>4</sub>; J = H]. All compds. I tested have IC<sub>50</sub> in the human C17,20 biochemical assay or the human C17,20 cellular assay of less than 10  $\mu$ M.

ST thiazole pyridyl isoquinolinyl prepn desmolase steroid C17C20 inhibitor antitumor; lyase C17C20 inhibitor thiazole pyridyl prepn prostate breast cancer

IT Human  
(preparation of 3-pyridyl or 4-isoquinolinyl thiazoles as C17,20 lyase inhibitors)

IT Antitumor agents  
Mammary gland, neoplasm  
Prostate gland, neoplasm  
(preparation of 3-pyridyl or 4-isoquinolinyl thiazoles as C17,20 lyase inhibitors for treating prostate and breast cancer)

IT 9044-50-2  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(preparation of 3-pyridyl or 4-isoquinolinyl thiazoles as C17,20 lyase inhibitors)

IT 435271-33-3P, 2-(4-Chloro-3-pyridyl)-4-(4-chlorophenyl)thiazole  
435271-60-6P 504387-41-1P, 2-(4-Chloromethyl-3-pyridyl)-4-(4-cyanophenyl)thiazole 504387-55-7P 504388-14-1P 504388-41-4P 504393-85-5P  
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of 3-pyridyl or 4-isoquinolinyl thiazoles as C17,20 lyase inhibitors)

IT 25021-37-8P 115541-27-0P 145737-61-7P 207406-59-5P 435271-64-0P  
435271-95-7P 435271-96-8P 435271-98-0P 435272-06-3P 435272-12-1P  
435272-27-8P 435272-66-5P 435272-98-3P 435273-04-4P 504387-29-5P,  
2-(4-Methyl-3-pyridinyl)-4-(4-chlorophenyl)thiazole hydrobromide  
504387-30-8P 504387-31-9P, 2-(4-Methyl-3-pyridinyl)-4-(4-chlorophenylmethyl)thiazole hydrochloride 504387-32-0P,  
2-(4-Cyclopropyl-3-pyridyl)-4-(4-chlorophenyl)thiazole 504387-33-1P,  
2-(3-Pyridyl)-4-(cyclohexyl)thiazole 504387-34-2P, 2-(3-Pyridyl)-4-(phenylamino)-5-methylthiazole 504387-35-3P, 2-(4-Methyl-3-pyridyl)-4-(N-methylcyclohexylamino)thiazole 504387-36-4P, 2-(3-Pyridyl)-4-(isopropoxy)thiazole 504387-37-5P, 2-(4-Methyl-3-pyridyl)-4-(cyclohexyl)-5-methylthiazole 504387-38-6P, 2-(3-Pyridyl)-4-(benzyloxy)thiazole 504387-39-7P, 3-[4-(4-Chlorophenyl)-1,3-thiazol-2-yl]-4-(1-piperidinyl)pyridine 504387-40-0P, 4-Methyl-3-[4-(1-piperidinylcarbonyl)-1,3-thiazol-2-yl]pyridine 504387-42-2P, 2-(4-((Dimethylamino)methyl)-3-

pyridyl)-4-(4-cyanophenyl)thiazole 504387-43-3P 504387-44-4P  
 504387-45-5P 504387-46-6P 504387-47-7P 504387-48-8P 504387-50-2P  
 504387-51-3P 504387-52-4P 504387-53-5P 504387-54-6P 504387-56-8P  
 504387-57-9P 504387-58-0P 504387-59-1P 504387-60-4P 504387-61-5P  
 504387-62-6P 504387-63-7P 504387-64-8P 504387-65-9P 504387-66-0P  
 504387-67-1P 504387-68-2P 504387-69-3P 504387-70-6P 504387-71-7P  
 504387-72-8P 504387-73-9P 504387-74-0P 504387-75-1P 504387-76-2P  
 504387-77-3P 504387-78-4P 504387-79-5P 504387-80-8P 504387-81-9P  
 504387-82-0P 504387-83-1P 504387-84-2P 504387-85-3P 504387-86-4P  
 504387-87-5P 504387-88-6P 504387-89-7P 504387-90-0P 504387-91-1P  
 504387-92-2P 504387-93-3P 504387-94-4P 504387-95-5P 504387-96-6P  
 504387-97-7P 504387-98-8P 504387-99-9P 504388-00-5P 504388-02-7P  
 504388-03-8P 504388-04-9P 504388-05-0P 504388-07-2P 504388-08-3P  
 504388-09-4P 504388-10-7P 504388-11-8P 504388-12-9P 504388-13-0P  
 504388-15-2P 504388-16-3P 504388-17-4P 504388-18-5P 504388-19-6P  
 504388-20-9P 504388-22-1P 504388-23-2P 504388-24-3P 504388-25-4P  
 504388-26-5P 504388-27-6P 504388-28-7P 504388-29-8P 504388-30-1P  
 504388-31-2P 504388-32-3P 504388-33-4P 504388-34-5P 504388-35-6P  
 504388-36-7P 504388-37-8P 504388-38-9P 504388-39-0P 504388-40-3P  
 504388-42-5P 504388-43-6P 504388-45-8P 504388-46-9P 504388-47-0P  
 504388-48-1P 504388-49-2P 504388-50-5P 504388-51-6P 504388-52-7P  
 504388-53-8P 504388-54-9P 504388-55-0P 504388-56-1P 504388-57-2P  
 504388-58-3P 504388-59-4P 504388-60-7P 504388-61-8P 504388-62-9P  
 504388-63-0P 504388-64-1P 504388-65-2P 504388-66-3P 504388-67-4P  
 504388-68-5P 504388-69-6P 504388-70-9P 504388-71-0P 504388-72-1P  
 504388-73-2P 504388-74-3P 504388-75-4P 504388-76-5P 504388-77-6P  
 504388-78-7P 504388-79-8P 504388-80-1P 504388-81-2P 504388-82-3P  
 504388-83-4P 504388-84-5P 504388-85-6P 504388-86-7P 504388-87-8P  
 504388-88-9P 504388-89-0P 504388-90-3P 504388-91-4P 504388-92-5P  
 504388-93-6P 504388-94-7P 504388-95-8P 504388-96-9P 504388-97-0P  
 504388-98-1P 504388-99-2P 504389-00-8P 504389-01-9P 504389-02-0P  
 504389-03-1P 504389-04-2P 504389-05-3P 504389-06-4P 504389-07-5P  
 504389-08-6P 504389-09-7P 504389-10-0P 504389-11-1P 504389-12-2P  
 504389-13-3P 504389-14-4P 504389-15-5P 504389-16-6P 504389-17-7P  
 504389-18-8P 504389-19-9P 504389-20-2P 504389-21-3P 504389-22-4P  
 504389-23-5P 504389-24-6P 504389-25-7P 504389-26-8P 504389-27-9P  
 504389-28-0P 504389-29-1P 504389-30-4P 504389-31-5P 504389-32-6P  
 504389-33-7P 504389-34-8P 504389-35-9P 504389-36-0P 504389-37-1P  
 504389-38-2P 504389-39-3P 504389-40-6P 504389-41-7P 504389-42-8P  
 504389-43-9P 504389-44-0P 504389-46-2P 504389-47-3P 504389-48-4P  
 504389-49-5P 504389-50-8P 504389-51-9P 504389-52-0P 504389-53-1P  
 504389-54-2P 504389-55-3P 504389-56-4P 504389-57-5P 504389-58-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 3-pyridyl or 4-isquinolinyl thiazoles as C17,20 lyase inhibitors)

IT	504389-59-7P	504389-60-0P	504389-61-1P	504389-62-2P	504389-63-3P
	504389-64-4P	504389-65-5P	504389-66-6P	504389-67-7P	504389-68-8P
	504389-69-9P	504389-70-2P	504389-71-3P	504389-72-4P	504389-73-5P
	504389-74-6P	504389-75-7P	504389-76-8P	504389-77-9P	504389-78-0P
	504389-79-1P	504389-80-4P	504389-81-5P	504389-82-6P	504389-84-8P
	504389-85-9P	504389-86-0P	504389-87-1P	504389-88-2P	504389-89-3P
	504389-90-6P	504389-91-7P	504389-92-8P	504389-93-9P	504389-94-0P
	504389-95-1P	504389-96-2P	504389-97-3P	504389-98-4P	504389-99-5P
	504390-00-5P	504390-01-6P	504390-02-7P	504390-03-8P	504390-04-9P
	504390-05-0P	504390-06-1P	504390-07-2P	504390-08-3P	504390-09-4P
	504390-10-7P	504390-11-8P	504390-12-9P	504390-13-0P	504390-14-1P
	504390-15-2P	504390-16-3P	504390-17-4P	504390-18-5P	504390-19-6P
	504390-20-9P	504390-21-0P	504390-22-1P	504390-23-2P	504390-24-3P
	504390-25-4P	504390-26-5P	504390-27-6P	504390-28-7P	504390-29-8P
	504390-30-1P	504390-31-2P	504390-32-3P	504390-33-4P	504390-34-5P
	504390-35-6P	504390-37-8P	504390-38-9P	504390-39-0P	504390-40-3P
	504390-41-4P	504390-42-5P	504390-43-6P	504390-44-7P	504390-45-8P
	504390-46-9P	504390-47-0P	504390-48-1P	504390-49-2P	504390-50-5P
	504390-51-6P	504390-52-7P	504390-53-8P	504390-54-9P	504390-55-0P

504390-56-1P 504390-57-2P 504390-58-3P 504390-59-4P 504390-60-7P  
 504390-62-9P 504390-63-0P 504390-64-1P 504390-65-2P 504390-66-3P  
 504390-67-4P 504390-68-5P 504390-69-6P 504390-70-9P 504390-71-0P  
 504390-72-1P 504390-73-2P 504390-74-3P 504390-76-5P 504390-77-6P  
 504390-78-7P 504390-79-8P 504390-80-1P 504390-81-2P 504390-82-3P  
 504390-83-4P 504390-84-5P 504390-85-6P 504390-86-7P 504390-87-8P  
 504390-88-9P 504390-89-0P 504390-90-3P 504390-91-4P 504390-92-5P  
 504390-93-6P 504390-94-7P 504390-95-8P 504390-96-9P 504390-97-0P  
 504390-98-1P 504390-99-2P 504391-00-8P 504391-01-9P 504391-02-0P  
 504391-03-1P 504391-04-2P 504391-05-3P 504391-06-4P 504391-07-5P  
 504391-08-6P 504391-09-7P 504391-10-0P 504391-11-1P 504391-12-2P  
 504391-13-3P 504391-14-4P 504391-15-5P 504391-17-7P 504391-18-8P  
 504391-19-9P 504391-20-2P 504391-21-3P 504391-22-4P 504391-23-5P  
 504391-25-7P 504391-26-8P 504391-27-9P 504391-29-1P 504391-30-4P  
 504391-31-5P 504391-32-6P 504391-33-7P 504391-34-8P,  
 4-(4-(2-Methylpropyl)-3-pyridyl)-2-(4-chlorophenyl)thiazole  
 504391-35-9P, 4-(4-Methyl-3-pyridyl)-5-(2-methylpropyl)-2-(4-chlorophenyl)thiazole 504391-36-0P 504391-37-1P 504391-38-2P  
 504391-39-3P 504391-40-6P 504391-41-7P 504391-42-8P 504391-43-9P  
 504391-44-0P 504391-45-1P 504391-46-2P 504391-47-3P 504391-48-4P  
 504391-49-5P 504391-50-8P 504391-51-9P 504391-52-0P 504391-53-1P  
 504391-54-2P 504391-55-3P 504391-56-4P 504391-57-5P 504391-59-7P  
 504391-60-0P 504391-61-1P 504391-62-2P 504391-63-3P 504391-64-4P  
 504391-65-5P 504391-66-6P 504391-67-7P 504391-68-8P 504391-69-9P  
 504391-70-2P 504391-71-3P 504391-72-4P 504391-74-6P 504391-76-8P  
 504391-77-9P 504391-78-0P 504391-79-1P 504391-80-4P 504391-81-5P  
 504391-82-6P 504391-83-7P 504391-84-8P 504391-85-9P 504391-87-1P  
 504391-89-3P 504391-90-6P 504391-91-7P 504391-92-8P 504391-93-9P  
 504391-94-0P 504391-95-1P 504391-96-2P 504391-97-3P 504391-98-4P  
 504391-99-5P 504392-00-1P 504392-01-2P 504392-02-3P 504392-03-4P  
 504392-04-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 3-pyridyl or 4-isoquinolinyl thiazoles as C17,20 lyase inhibitors)

IT	504392-05-6P	504392-06-7P	504392-07-8P	504392-08-9P	504392-09-0P
	504392-10-3P	504392-11-4P	504392-12-5P	504392-13-6P	504392-14-7P
	504392-15-8P	504392-16-9P	504392-17-0P	504392-19-2P	504392-20-5P
	504392-21-6P	504392-22-7P	504392-23-8P	504392-24-9P	504392-25-0P
	504392-26-1P	504392-28-3P	504392-29-4P	504392-30-7P	504392-31-8P
	504392-32-9P	504392-33-0P	504392-34-1P	504392-35-2P	504392-36-3P
	504392-37-4P	504392-39-6P	504392-40-9P	504392-41-0P	504392-43-2P
	504392-44-3P	504392-45-4P	504392-46-5P	504392-47-6P	504392-48-7P
	504392-49-8P	504392-50-1P	504392-51-2P	504392-52-3P	504392-53-4P
	504392-55-6P	504392-57-8P	504392-58-9P	504392-59-0P	504392-60-3P
	504392-61-4P	504392-63-6P	504392-65-8P	504392-67-0P	504392-69-2P
	504392-71-6P	504392-73-8P	504392-75-0P	504392-77-2P	504392-79-4P
	504392-81-8P	504392-83-0P	504392-85-2P	504392-87-4P	504392-89-6P
	504392-91-0P	504392-93-2P	504392-95-4P	504392-97-6P	504392-99-8P
	504393-01-5P	504393-03-7P	504393-05-9P	504393-07-1P	
	504393-09-3P	504393-11-7P	504393-13-9P	504393-15-1P	504393-17-3P
	504393-19-5P	504393-21-9P	504393-23-1P	504393-25-3P	504393-27-5P
	504393-29-7P	504393-31-1P	504393-33-3P	504393-35-5P	504393-37-7P
	504393-39-9P	504393-40-2P	504393-41-3P	504393-42-4P	504393-43-5P
	504393-44-6P	504393-45-7P	504393-46-8P	504393-47-9P	504393-48-0P
	504393-49-1P	504393-50-4P	504393-51-5P	504393-52-6P	504393-53-7P
	504393-54-8P	504393-55-9P	504393-56-0P	504393-57-1P	504393-58-2P
	504393-59-3P	504393-60-6P	504393-61-7P	504393-62-8P	504393-63-9P
	504393-64-0P	504393-65-1P	504393-66-2P	504393-67-3P	504393-68-4P
	504393-69-5P	504393-70-8P	504393-71-9P	504393-72-0P	504393-73-1P
	504393-74-2P	504393-75-3P	504393-76-4P	504393-77-5P	504393-78-6P
	504393-79-7P	504393-80-0P	504393-82-2P	504393-83-3P	504393-84-4P
	504393-86-6P	504393-87-7P	504393-88-8P	504393-89-9P	504393-90-2P
	504393-91-3P	504393-92-4P	504393-93-5P	504393-94-6P	504393-95-7P
	504393-96-8P	504393-97-9P	504393-98-0P	504393-99-1P	504394-00-7P

504394-01-8P 504394-02-9P 504394-03-0P 504394-04-1P 504394-05-2P  
 504394-06-3P 504394-07-4P 504394-08-5P 504394-09-6P 504394-10-9P  
 504394-11-0P 504394-12-1P 504394-14-3P 504394-16-5P 504394-18-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 3-pyridyl or 4-isouquinolinyl thiazoles as C17,20 lyase inhibitors)

IT 79-03-8, Propanoyl chloride 79-30-1, 2-Methylpropanoyl chloride  
 94-02-0, Ethyl 3-oxo-3-phenylpropanoate 100-54-9, 3-Cyanopyridine  
 107-91-5, 2-Cyanoacetamide 109-89-7, Diethylamine, reactions 110-89-4,  
 Piperidine, reactions 350-03-8, 3-Acetylpyridine 405-50-5,  
 4-Fluorophenylacetic acid 502-42-1, Cycloheptanone 529-34-0,  
 α-Tetralone 536-38-9 621-36-3, 3-Methylphenylacetic acid  
 622-47-9, 4-Methylphenylacetic acid 677-22-5, tert-Butylmagnesium  
 chloride 771-61-9, Pentafluorophenol 823-76-7, Cyclohexyl methyl  
 ketone 1068-55-9, Isopropylmagnesium chloride 1071-46-1, Ethyl  
 malonate 1078-19-9, 6-Methoxy-1-tetralone 1113-59-3, Bromopyruvic acid  
 1122-54-9, 4-Acetylpyridine 1122-62-9, 2-Acetylpyridine 1193-79-9,  
 2-Acetyl-5-methylfuran 1532-97-4, 4-Bromoisoquinoline 1877-73-2,  
 3-Nitrophenylacetic acid 1878-65-5, 3-Chlorophenylacetic acid  
 2567-56-8, 2-Chloro-N-cyclohexyl-N-methylacetamide 3249-68-1, Ethyl  
 3-oxohexanoate 4252-78-2, 2,2',4'-Trichloroacetophenone 4333-56-6,  
 Cyclopropyl bromide 4524-93-0, Cyclopropylcarbonyl chloride 4621-66-3,  
 Thionicotinamide 4637-24-5, Dimethylformamide dimethylacetal  
 5002-07-3, 4-(4-Chlorophenyl)acetophenone 5031-78-7 5437-45-6, Benzyl  
 bromoacetate 5444-02-0, 2,6-Dihydroxy-4-methyl-3-pyridinecarbonitrile  
 5807-30-7, 3,4-Dichlorophenylacetic acid 6285-05-8, 4'-  
 Chloropropiophenone 6310-09-4, 2-Acetyl-5-chlorothiophene 6443-85-2,  
 3-Pyridylacetonitrile 6836-19-7, 7-Methoxy-1-tetralone 14996-78-2,  
 2-Phenylcycloheptanone 23719-80-4, Cyclopropylmagnesium bromide  
 25026-34-0, 4-Chlorophenylacetyl chloride 42308-20-3,  
 2-Bromo-N-phenylpropionamide 63917-11-3 99684-03-4,  
 Bicyclo[3.2.1]octanone 237069-82-8, 2,4-Di(trifluoromethyl)acetophenone  
 504394-23-4, 2-(4-Methylpyridyl)-4-cyclohexylthiazole 504394-24-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of 3-pyridyl or 4-isouquinolinyl thiazoles as C17,20 lyase inhibitors)

IT 613-34-3P 766-65-4P, 2-Bromocycloheptanone 875-35-4P 877-37-2P,  
 2-Bromo-4'-chloropropiophenone 1634-53-3P, 2-(Bromoacetyl)-5-methylfuran  
 3222-55-7P 4949-44-4P 5349-17-7P 5444-01-9P, 4-Methyl-3-  
 cyanopyridine 6713-48-0P 7152-15-0P 10494-87-8P 13672-07-6P,  
 2-Bromo-1-tetralone 17570-98-8P 17694-68-7P 20933-24-8P,  
 2-Bromo-6-methoxy-1-tetralone 21443-38-9P 23328-64-5P 24253-14-3P,  
 1-(4-Methylphenyl)-3-chloro-2-propanone 24253-15-4P,  
 1-(3-Methylphenyl)-3-chloro-2-propanone 24253-17-6P,  
 1-(3-Chlorophenyl)-3-chloro-2-propanone 24253-18-7P,  
 1-(3-Nitrophenyl)-3-chloro-2-propanone 24476-58-2P 24922-00-7P  
 28179-33-1P 33107-81-2P, 1-(3,4-Dichlorophenyl)-3-chloro-2-propanone  
 33107-83-4P, 1-Chloro-3-(4-chlorophenyl)-2-propanone 34846-65-6P,  
 4-Cyanoisoquinoline 37860-86-9P 38824-78-1P 39065-51-5P  
 39098-47-0P 39621-09-5P 39974-18-0P, 3-Bromobicyclo[3.2.1]octan-2-one  
 51227-30-6P 51451-44-6P, 3-Pyridineethanethioamide 52338-11-1P  
 52338-17-7P 56077-28-2P 57731-17-6P, 2-(Bromoacetyl)-5-chlorothiophene  
 58534-32-0P 61889-48-3P 74133-20-3P, 4-Methoxy-3-cyanopyridine  
 85928-57-0P, 2-Bromo-7-methoxy-1-tetralone 95689-38-6P,  
 1,1-Dicyano-2-methoxy-4-dimethylamino-1,3-butadiene 98645-43-3P,  
 2-Chloro-3-cyano-4-methoxypyridine 108134-82-3P 149467-75-4P  
 156861-46-0P 303967-88-6P, 1-(4-Fluorophenyl)-3-chloro-2-propanone  
 435271-21-9P 435271-27-5P 435271-31-1P 435271-32-2P,  
 4-Isoquinolinecarbothioamide 435273-43-1P 435273-45-3P 435273-46-4P  
 503843-49-0P 503843-50-3P 503843-54-7P 503843-55-8P 503843-59-2P  
 503843-65-0P 503843-67-2P 503843-69-4P 503856-54-0P 503856-57-3P  
 503856-58-4P 503856-59-5P 503856-60-8P 503856-62-0P 503856-63-1P  
 503856-94-8P 503856-95-9P 503856-96-0P 503856-99-3P 503857-00-9P  
 503857-01-0P 503857-02-1P 503857-18-9P 503859-52-7P,

2-Bromo-7-phenylcycloheptanone 504394-19-8P 504394-20-1P  
 504394-21-2P 504394-22-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of 3-pyridyl or 4-isoquinolinyl thiazoles as C17,20 lyase inhibitors)

IT 504393-01-5P 504393-03-7P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of 3-pyridyl or 4-isoquinolinyl thiazoles as C17,20 lyase inhibitors)

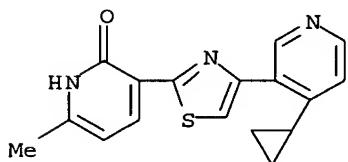
RN 504393-01-5 HCPLUS

CN 2(1H)-Pyridinone, 3-[4-(4-cyclopropyl-3-pyridinyl)-2-thiazolyl]-6-methyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 504393-00-4

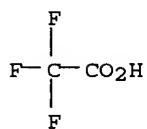
CMF C17 H15 N3 O S



CM 2

CRN 76-05-1

CMF C2 H F3 O2



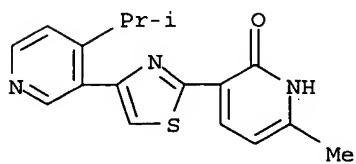
RN 504393-03-7 HCPLUS

CN 2(1H)-Pyridinone, 6-methyl-3-[4-[4-(1-methylethyl)-3-pyridinyl]-2-thiazolyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

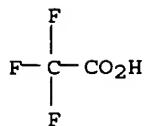
CRN 504393-02-6

CMF C17 H17 N3 O S



CM 2

CRN 76-05-1  
 CMF C2 H F3 O2



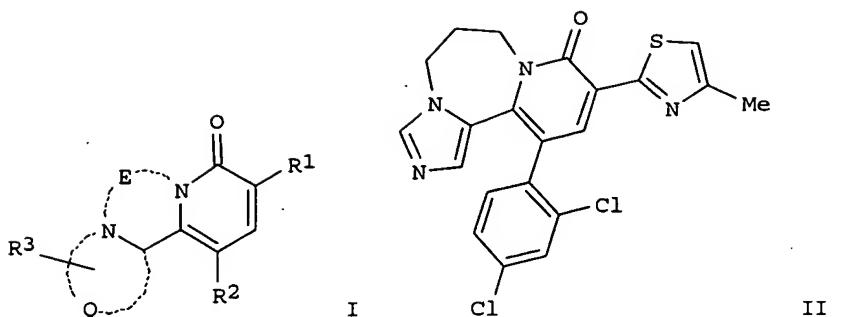
L53 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2003:173578 HCAPLUS  
 DN 138:221605  
 ED Entered STN: 07 Mar 2003  
 TI Preparation of tricyclic pyridin-2-one analogues as ligands for GABAA receptors  
 IN Bourrain, Sylvie; Goodacre, Simon Charles; Hallett, David James; Lewis, Richard Thomas; Rowley, Michael; Sternfeld, Francine; Street, Leslie Joseph  
 PA Merck Sharp & Dohme Limited, UK  
 SO PCT Int. Appl., 46 pp.  
 CODEN: PIIXD2  
 DT Patent  
 LA English  
 IC ICM C07D  
 CC 28-21 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 1

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003018546	A2	20030306	WO 2002-GB3703	20020812 <--
	WO 2003018546	A3	20030717		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	PRAI GB 2001-20345	A	20010821 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003018546	ICM	C07D
WO 2003018546	ECLA	C07D471/14+243D+235C+221C; C07D471/14+249C+243C+221C<--
OS MARPAT	138:221605	
GI		



**AB** The title fused tricyclic compds. I [E = (CH<sub>2</sub>)<sub>n</sub>; n = 1-3; Q = the residue of an imidazole or triazole ring; R<sub>1</sub>, R<sub>2</sub> = H, halo, heterocycl, etc.; R<sub>3</sub> = H, alkyl] which are potent and functionally selective ligands for the α<sub>2</sub>/α<sub>3</sub> subunit of the human GABAA receptor and are thereby effective in the treatment of anxiety and convulsions, were prepared E.g., a 7-step synthesis of II, starting from Et (4-methylthiazol-2-yl)acetate and 3-aminopropanol, was given. The exemplified compds. I were found to possess a Ki of ≤ 100 nM for displacement of [<sup>3</sup>H]-flumazenil from the α<sub>2</sub> and/or α<sub>3</sub> subunit of the human GABAA receptor.

**ST** pyridinone tricyclic fused prepn GABAA receptor ligand anxiolytic anticonvulsant; triazabenzoazulenone prep GABAA receptor ligand anxiolytic anticonvulsant; benzoazulenone triaza prep GABAA receptor ligand anxiolytic anticonvulsant

**IT** GABA receptors  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(GABAA; preparation of tricyclic pyridin-2-one analogs as ligands for GABAA receptors)

**IT** Anticonvulsants  
Anxiolytics  
Human  
(preparation of tricyclic pyridin-2-one analogs as ligands for GABAA receptors)

**IT** Anxiety  
Convulsion  
(treatment of; preparation of tricyclic pyridin-2-one analogs as ligands for GABAA receptors)

**IT** 500725-31-5P 500725-61-1P 500725-69-9P 500725-71-3P  
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of tricyclic pyridin-2-one analogs as ligands for GABAA receptors)

**IT** 500725-30-4P 500725-32-6P 500725-33-7P 500725-34-8P 500725-35-9P  
500725-36-0P 500725-37-1P 500725-38-2P 500725-39-3P 500725-40-6P  
500725-41-7P 500725-42-8P 500725-43-9P 500725-44-0P 500725-45-1P  
500725-46-2P 500725-47-3P 500725-48-4P 500725-49-5P 500725-50-8P  
500725-51-9P 500725-52-0P 500725-53-1P 500725-54-2P 500725-55-3P  
500725-56-4P 500725-57-5P 500725-58-6P 500725-59-7P 500725-60-0P  
500725-62-2P 500725-63-3P 500725-64-4P 500725-65-5P 500725-66-6P  
500725-67-7P 500725-68-8P 500725-70-2P 500725-72-4P 500725-73-5P  
500725-74-6P 500725-75-7P 500725-76-8P 500725-78-0P 500725-79-1P  
500725-80-4P 500725-81-5P 500725-82-6P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of tricyclic pyridin-2-one analogs as ligands for GABAA receptors)

**IT** 98-80-6, Phenylboronic acid 100-52-7, Benzaldehyde, reactions  
105-53-3, Diethyl malonate 156-87-6, 3-Aminopropanol 288-32-4,  
Imidazole, reactions 288-88-0, 1H-1,2,4-Triazole 627-18-9 765-43-5,

Cyclopropyl methyl ketone 1072-84-0, Imidazole-4-carboxylic acid  
 2295-31-0, Thiazolidine-2,4-dione 2919-23-5, Cyclobutanol 4637-24-5  
 13621-50-6, Ethyl thiocarbamoylacetate 51221-43-3 68716-47-2,  
 2,4-Dichlorophenylboronic acid 104863-68-5 173739-73-6,  
 (4-Methylthiazol-2-yl)acetamide 500725-97-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of tricyclic pyridin-2-one analogs as ligands for GABAA receptors)

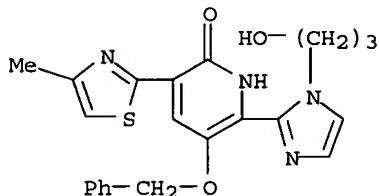
IT 4175-76-2P, 2,4-Dichlorothiazole 288384-22-5P 371765-60-5P  
 500725-83-7P 500725-84-8P 500725-85-9P 500725-86-0P 500725-87-1P  
 500725-88-2P 500725-89-3P 500725-90-6P 500725-91-7P 500725-92-8P  
 500725-93-9P 500725-94-0P 500725-95-1P 500725-96-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tricyclic pyridin-2-one analogs as ligands for GABAA receptors)

IT 500725-93-9P 500725-95-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of tricyclic pyridin-2-one analogs as ligands for GABAA receptors)

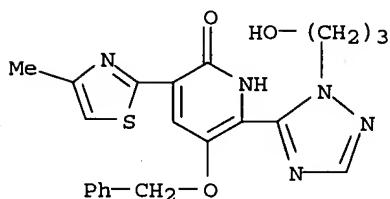
RN 500725-93-9 HCPLUS

CN 2(1H)-Pyridinone, 6-[1-(3-hydroxypropyl)-1H-imidazol-2-yl]-3-(4-methyl-2-thiazolyl)-5-(phenylmethoxy)- (9CI) (CA INDEX NAME)



RN 500725-95-1 HCPLUS

CN 2(1H)-Pyridinone, 6-[1-(3-hydroxypropyl)-1H-1,2,4-triazol-5-yl]-3-(4-methyl-2-thiazolyl)-5-(phenylmethoxy)- (9CI) (CA INDEX NAME)



L53 ANSWER 4 OF 11 HCPLUS COPYRIGHT 2005 ACS on STN

AN 2002:890774 HCPLUS

DN 138:122281

ED Entered STN: 25 Nov 2002

TI Synthesis and Conformational Dynamics of Tricyclic Pyridones Containing a Fused Seven-Membered Ring

AU Gibson, Karl R.; Hitzel, Laure; Mortishire-Smith, Russell J.; Gerhard, Ute; Jolley, Richard A.; Reeve, Austin J.; Rowley, Michael; Nadin, Alan; Owens, Andrew P.

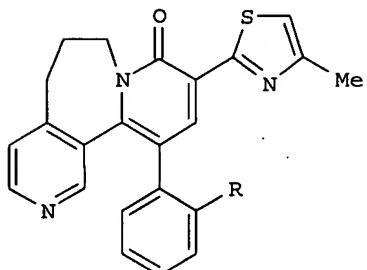
CS Medicinal Chemistry Department, Neuroscience Research Centre, Merck Sharp Dohme Research Laboratories, Harlow/Essex, CM20 2QR, UK

SO Journal of Organic Chemistry (2002), 67(26), 9354-9360

CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal  
 LA English  
 CC 22-3 (Physical Organic Chemistry)  
 OS CASREACT 138:122281  
 GI



AB A new synthetic approach to tricyclic pyridones bearing a fused seven-membered ring, e.g., I (R = H, Me), is described. These compds. exhibit atropisomerism and exist in enantiomeric forms. Chiral HPLC separation of the enantiomers has allowed the rates of racemization to be measured and hence the free energy barrier for flipping the seven-membered ring to be deduced. Introduction of a further element of planar chirality leads to diastereomeric atropisomerism. The rate of interconversion of the diastereomers has been quantified by 2D EXSY NMR spectroscopy allowing a full description of the conformational dynamics of the system.

ST diazadibenzocycloheptenone arylidihydrothiazolyl prepn conformational dynamics; tricyclic pyridinone prepn conformational dynamics; diastereomeric atropisomerism tricyclic pyridinone; racemization kinetics tricyclic pyridinone; chiral HPLC tricyclic pyridinone

IT Atropisomers  
 Conformational transition  
 Racemization kinetics  
 (preparation and conformational dynamics of tricyclic pyridinones containing fused seven-membered ring)

IT Potential barrier  
 (ring flip; preparation and conformational dynamics of tricyclic pyridinones containing fused seven-membered ring)

IT 216012-57-6  
 RL: PRP (Properties)  
 (preparation and conformational dynamics of tricyclic pyridinones containing fused seven-membered ring)

IT 216012-61-2P 489466-63-9P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and conformational dynamics of tricyclic pyridinones containing fused seven-membered ring)

IT 229184-01-4P 380830-44-4P 380830-45-5P 380830-46-6P 489466-55-9P  
 489466-56-0P 489466-57-1P 489466-58-2P 489466-59-3P 489466-60-6P  
 489466-61-7P 489466-62-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and conformational dynamics of tricyclic pyridinones containing fused seven-membered ring)

IT 4637-24-5, DMF dimethyl acetal  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prereactant with benzyl pyridinyl ketone; preparation and conformational dynamics of tricyclic pyridinones containing fused seven-membered ring)

IT 75-21-8, Ethylene oxide, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prereactant with bromomethylpyridine; preparation and conformational dynamics of tricyclic pyridinones containing fused seven-membered ring)

IT 173739-73-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prereactant with enamino ketone; preparation and conformational dynamics of  
 tricyclic pyridinones containing fused seven-membered ring)

IT 3430-22-6, 3-Bromo-4-methylpyridine

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prereactant with oxirane; preparation and conformational dynamics of  
 tricyclic pyridinones containing fused seven-membered ring)

IT 101-41-7, Methyl phenylacetate 40851-62-5, Methyl o-tolylacetate

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prereactant with pyridinecarboxylate ester; preparation and conformational  
 dynamics of tricyclic pyridinones containing fused seven-membered ring)

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

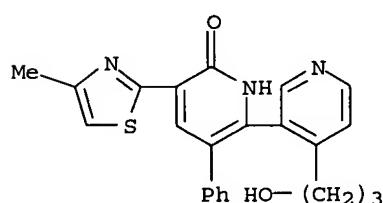
- (1) Bracher, F; Liebigs Ann 1995, P645 HCPLUS
- (2) Burner, S; Heterocycles 1994, V37, P239 HCPLUS
- (3) Collins, I; J Med Chem 2002, V45, P1887 HCPLUS
- (4) Domasevich, K; Zh Obshch Khim 1995, V65, P1031 HCPLUS
- (5) Eliel, E; Stereochemistry of Organic Compounds 1994
- (6) Fischer, U; Helv Chim Acta 1990, V73, P763 HCPLUS
- (7) Gutowsky, H; J Chem Phys 1956, V25, P1228 HCPLUS
- (8) Harrison, T; WO 9850384 HCPLUS
- (9) Jones, G; Comprehensive Heterocyclic Chemistry 1984, V2, P395
- (10) Jones, G; Comprehensive Heterocyclic Chemistry II 1996, V5, P167 HCPLUS
- (11) Kitagawa, O; Tetrahedron Lett 2000, V41, P8539 HCPLUS
- (12) Krapcho, A; Tetrahedron Lett 1973, V14, P957
- (13) Lesher, G; US 4264612 1981 HCPLUS
- (14) Lesher, G; US 4313951 1982 HCPLUS
- (15) Mullen, K; Chem Ber 1990, V123, P2349
- (16) Nadin, A; Tetrahedron Lett 1999, V40, P4073 HCPLUS
- (17) Oki, M; Top Stereochem 1983, V14, P1 HCPLUS
- (18) Perrin, C; Chem Rev 1990, V90, P935 HCPLUS
- (19) Robertson, D; J Med Chem 1986, V29, P635 HCPLUS
- (20) Sircar, I; J Med Chem 1987, V30, P1023 HCPLUS
- (21) Spurr, P; Tetrahedron Lett 1995, V36, P2745 HCPLUS
- (22) Zoltewicz, J; J Org Chem 1996, V61, P7018 HCPLUS

IT 489466-61-7P 489466-62-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and conformational dynamics of tricyclic pyridinones containing  
 fused seven-membered ring)

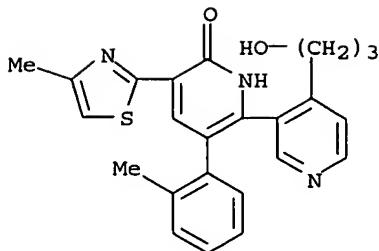
RN 489466-61-7 HCPLUS

CN [2,3'-Bipyridin]-6(1H)-one, 4'-(3-hydroxypropyl)-5-(4-methyl-2-thiazolyl)-  
 3-phenyl- (9CI) (CA INDEX NAME)



RN 489466-62-8 HCPLUS

CN [2,3'-Bipyridin]-6(1H)-one, 4'-(3-hydroxypropyl)-3-(2-methylphenyl)-5-(4-methyl-2-thiazolyl)- (9CI) (CA INDEX NAME)

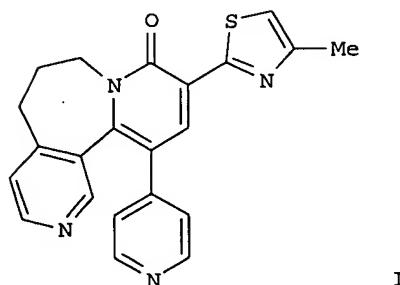


L53 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2001:924319 HCAPLUS  
 DN 136:37599  
 ED Entered STN: 21 Dec 2001  
 TI Preparation of tricyclic pyridin-2-one analogue as a GABA receptor ligand  
 IN Crawforth, James Michael; Gibson, Karl Richard; Rowley, Michael  
 PA UK  
 SO U.S. Pat. Appl. Publ., 8 pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 IC ICM A61K031-55  
 ICS C07D487-14  
 INCL 514214010  
 CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 1

FAN.CNT 1				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2001053776	A1	20011220	US 2001-861318	20010518 <--
PRAI GB 2000-12708	A	20000524	<--	
GB 2001-3525	A	20010213	<--	

CLASS			
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
US 2001053776	ICM	A61K031-55	
	ICS	C07D487-14	
	INCL	514214010	
US 2001053776	NCL	514/214.010; 540/579.000	
	ECLA	C07D487/14+223C+221C+221B	

GI



I

AB 9-(4-Methylthiazol-2-yl)-11-(pyridin-4-yl)-6,7-dihydro-5H-2,7a-diazadibenzo[a,c]cyclohepten-8-one (I), and pharmaceutically acceptable salts thereof, are selective ligands for GABA receptors, in particular having high affinity for the  $\alpha_2$  and/or  $\alpha_3$  subunit thereof, and are accordingly of benefit in the treatment and/or prevention of disorders

of the central nervous system, including anxiety and convulsions. A multi-step synthesis of compound I (along with two alternative procedures) which showed Ki of < 1 nM for displacement of [<sup>3</sup>H]-flumazenil from the  $\alpha 2$  and/or  $\alpha 3$  subunit of the human GABAA receptor, was given.

ST tricyclic pyridinone analog prepn GABA receptor ligand;  
methylthiazolylpyridinyldihydrodiazabenzocycloheptenone prepn GABA receptor ligand; anxiolytic methylthiazolylpyridinyldihydrodiazabenzocycloheptenone prepn; anticonvulsant methylthiazolylpyridinyldihydrodiazabenzocycloheptenone prepn

IT GABA receptors  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(GABAA; preparation of tricyclic pyridin-2-one analog as a GABA receptor ligand)

IT Anticonvulsants  
Anxiolytics  
(preparation of tricyclic pyridin-2-one analog as a GABA receptor ligand)

IT 380830-41-1P 380830-42-2P 380830-43-3P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of tricyclic pyridin-2-one analog as a GABA receptor ligand)

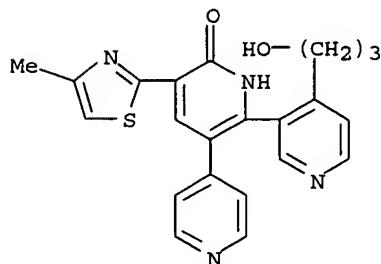
IT 1692-15-5, Pyridine-4-boronic acid 54401-85-3, Ethyl 4-pyridylacetate 173739-73-6, 4-Methylthiazole-2-acetamide 216012-92-9 229184-01-4,  
3-Bromo-4-(3-hydroxypropyl)pyridine  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of tricyclic pyridin-2-one analog as a GABA receptor ligand)

IT 380830-44-4P 380830-45-5P 380830-46-6P 380830-47-7P 380830-48-8P  
380830-49-9P 380830-50-2P, Benzyl 2-(4-pyridyl)acetate  
380830-51-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of tricyclic pyridin-2-one analog as a GABA receptor ligand)

IT 380830-49-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of tricyclic pyridin-2-one analog as a GABA receptor ligand)

RN 380830-49-9 HCAPLUS

CN [3,2':3',4''-Terpyridin]-6'(1'H)-one, 4-(3-hydroxypropyl)-5'-(4-methyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



L53 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1999:321276 HCAPLUS  
 DN 131:73587  
 ED Entered STN: 26 May 1999  
 TI Synthesis of tricyclic pyridones by radical cyclization  
 AU Nadin, Alan; Harrison, Timothy  
 CS Department of Medicinal Chemistry, Neuroscience Research Centre, Merck Sharp and Dohme Research Laboratories, Essex, CM20 2QR, UK  
 SO Tetrahedron Letters (1999), 40(21), 4073-4076  
 CODEN: TELEAY; ISSN: 0040-4039  
 PB Elsevier Science Ltd.

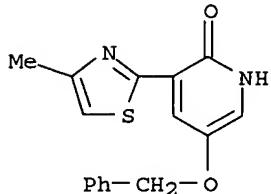
DT Journal  
 LA English  
 CC 28-2 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 27  
 OS CASREACT 131:73587  
 AB A general and novel route for the synthesis of tricyclic pyridones by 5-, 6- and 7-exo-trig radical cyclization is described. The use of Pd-catalyzed cross-coupling reactions to introduce functionality at the 5-position of a pyridone is also presented.  
 ST tricyclic pyridone prepn  
 IT Cross-coupling reaction  
     (Pd-catalyzed cross-coupling reactions at the 5-position of a tricyclic pyridone)  
 IT Alkylation  
     (preparation of tricyclic pyridones via pyridone N-alkylation and radical cyclization)  
 IT Cyclization  
     (radical; preparation of tricyclic pyridones via pyridone N-alkylation and radical cyclization)  
 IT 536-74-3, Phenylacetylene 1074-16-4 5720-06-9, 2-Methoxybenzeneboronic acid 5720-07-0, 4-Methoxybenzeneboronic acid 6783-05-7 10365-98-7, 3-Methoxybenzeneboronic acid 18982-54-2 42783-78-8 87199-17-5, 4-Formylbenzeneboronic acid 173739-73-6 197007-87-7 216012-95-2 229184-00-3 229184-01-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
     (preparation of tricyclic pyridones via pyridone N-alkylation and radical cyclization)  
 IT 143462-35-5P 216011-87-9P 216012-32-7P 216012-90-7P  
 216012-91-8P 216012-92-9P 216012-93-0P 229184-02-5P 229184-03-6P  
 229184-04-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
     (preparation of tricyclic pyridones via pyridone N-alkylation and radical cyclization)  
 IT 216012-36-1P 216012-50-9P 216012-52-1P 216012-55-4P 216012-57-6P  
 216012-75-8P 216012-77-0P 216012-78-1P 216012-79-2P 229184-05-8P  
 229184-06-9P 229184-07-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
     (preparation of tricyclic pyridones via pyridone N-alkylation and radical cyclization)

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Aldabbagh, W; Tetrahedron Lett 1997, V38, P7937
- (2) Aldabbagh, W; Tetrahedron Lett 1997, V38, P7937
- (3) Boger, D; J Org Chem 1988, V53, P3377 HCPLUS
- (4) Bracher, F; Liebigs Ann 1995, P645 HCPLUS
- (5) Burner, S; Heterocycles 1994, V37, P239 HCPLUS
- (6) Collins, I; PCT Int Appl WO 98/55480
- (7) Collins, I; PCT Int Appl WO 98/55480
- (8) Comins, D; Tetrahedron Lett 1994, V35, P5331 HCPLUS
- (9) Domasevich, K; Zh Obshch Khim 1995, V65, P1031 HCPLUS
- (10) Fischer, U; Helv Chim Acta 1990, V73, P763 HCPLUS
- (11) Fu, J; Synlett 1998, P1408 HCPLUS
- (12) Giese, B; Organic Reactions 1996, V48, P301 HCPLUS
- (13) Gluncic, B; Croat Chim Acta 1966, V38, P235 HCPLUS
- (14) Grigg, R; Tetrahedron 1991, V47, P9703 HCPLUS
- (15) Harrison, T; WO 98/50384 HCPLUS
- (16) Hartwig, J; Angew Chem Int Ed Engl 1998, V37, P2046 HCPLUS
- (17) Heck, R; Organic Reactions 1982, V27, P345 HCPLUS
- (18) Jones, K; Tetrahedron 1998, V54, P2275 HCPLUS
- (19) Kawato, Y; Prog Med Chem 1997, V34, P69 HCPLUS
- (20) Kelly, T; J Org Chem 1992, V57, P1593 HCPLUS
- (21) Liu, H; Tetrahedron Lett 1995, V36, P8917 HCPLUS
- (22) Pendrak, I; J Org Chem 1995, V60, P2912 HCPLUS
- (23) Quesnelle, C; Synlett 1994, P349 HCPLUS
- (24) Sheehan, S; J Org Chem 1997, V62, P438 HCPLUS

(25) Spurr, P; Tetrahedron Lett 1995, V36, P2745 HCAPLUS  
 (26) Suzuki, A; Acc Chem Res 1982, V15, P178 HCAPLUS  
 (27) Yerxa, B; Tetrahedron 1994, V50, P6173 HCAPLUS  
 IT 216011-87-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of tricyclic pyridones via pyridone N-alkylation and radical cyclization)  
 RN 216011-87-9 HCAPLUS  
 CN 2-(1H)-Pyridinone, 3-(4-methyl-2-thiazolyl)-5-(phenylmethoxy)- (9CI) (CA INDEX NAME)

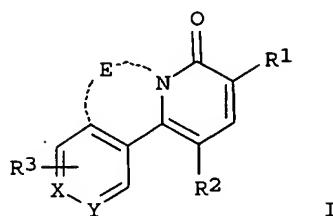


L53 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1998:745054 HCAPLUS  
 DN 130:13918  
 ED Entered STN: 24 Nov 1998  
 TI Preparation of tricyclic pyridone analogs as GABA-A receptor ligands  
 IN Harrison, Timothy; Moyes, Christopher Richard; Nadin, Alan; Owens, Andrew  
 Pate, Lewis, Richard Thomas  
 PA Merck Sharp & Dohme Ltd., UK  
 SO PCT Int. Appl., 48 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C07D471-14  
 ICS C07D471-04; A61K031-435; C07D471-14; C07D223-00; C07D221-00;  
 C07D221-00; C07D471-04; C07D223-00; C07D221-00; C07D471-14;  
 C07D221-00; C07D221-00; C07D209-00; C07D471-14; C07D221-00;  
 C07D221-00; C07D221-00  
 CC 27-16 (Heterocyclic Compounds (One Hetero Atom))  
 Section cross-reference(s): 1, 28

FAN.CNT	1	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9850384	A1	19981112	WO 1998-GB1167	19980422	<--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
	CA 2287929	AA	19981112	CA 1998-2287929	19980422	<--
	AU 9870661	A1	19981127	AU 1998-70661	19980422	<--
	AU 738297	B2	20010913			
	EP 980371	A1	20000223	EP 1998-917431	19980422	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI JP 2001522375	T2	20011113	JP 1998-547811	19980422	<--
	US 6133255	A	20001017	US 1999-381988	19990927	<--
PRAI	GB 1997-8945	A	19970501	<--		
	WO 1998-GB1167	W	19980422	<--		

CLASS  
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

-----  
 WO 9850384 ICM C07D471-14  
 ICS C07D471-04; A61K031-435; C07D471-14; C07D223-00;  
 C07D221-00; C07D221-00; C07D471-04; C07D223-00;  
 C07D221-00; C07D471-14; C07D221-00; C07D221-00;  
 C07D209-00; C07D471-14; C07D221-00; C07D221-00;  
 C07D221-00  
 WO 9850384 ECLA C07D471/04+223C+221C; C07D471/14+221C+221C+221B;  
 C07D471/14+221C+221B+209C; C07D471/14+223C+221C+221B<--  
 US 6133255 NCL 514/214.010; 514/214.020; 540/586.000  
 ECLA C07D471/04+223C+221C; C07D471/14+223C+221C+221B;  
 C07D471/14+221C+221B+209C; C07D471/14+221C+221C+221B<--  
 OS MARPAT 130:13918  
 GI



AB A class of tricyclic pyridin-2-one analogs, substituted at the 3-position of the pyridone ring by an ester or thiazole moiety [I; E = (CH<sub>2</sub>)<sub>n</sub>; n = 1-3; one of X and Y = CH, N, N+O-, and the other is CH; R1 = methoxycarbonyl, ethoxycarbonyl, methylthiazolyl, hydroxymethylthiazolyl; R2, R3 = H, alkyl, heterocyclyl, etc.] which are selective ligands for GABAA receptors, in particular having high affinity for the α2 and/or α3 subunit thereof, and are accordingly of benefit in the treatment and/or prevention of disorders of the central nervous system, including anxiety and convulsions, were prepared. Thus, refluxing 5-benzyloxy-1-[3-(3-bromopyridin-4-yl)propyl]-3-(4-methylthiazol-2-yl)-1H-pyridin-2-one (preparation described) with Bu<sub>3</sub>SnH and AIBN in C<sub>6</sub>H<sub>6</sub> afforded 50% I [E = (CH<sub>2</sub>)<sub>3</sub>; R1 = 4-methylthiazol-2-yl; R2 = PhCH<sub>2</sub>O; R3 = H; Y = N; X = CH]. All prepared compds. I were found to possess a Ki of ≤ 100 nM for displacement of [<sup>3</sup>H]-flumazenil from the α2 and/or α3 subunit of the human GABAA receptor.

ST pyridone tricyclic analog prepn GABA ligand; anxiolytic pyridone tricyclic analog prepn; anticonvulsant pyridone tricyclic analog prepn

IT GABA receptors  
 RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)  
 (GABAA; preparation of tricyclic pyridone analogs as GABA-A receptor ligands)

IT Anticonvulsants  
 Anxiolytics  
 (preparation of tricyclic pyridone analogs as GABA-A receptor ligands)

IT 216012-32-7P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (preparation of tricyclic pyridone analogs as GABA-A receptor ligands)

IT 216012-36-1P 216012-44-1P 216012-47-4P 216012-49-6P 216012-50-9P  
 216012-52-1P 216012-55-4P 216012-56-5P 216012-57-6P 216012-58-7P  
 216012-59-8P 216012-60-1P 216012-61-2P 216012-63-4P 216012-64-5P  
 216012-65-6P 216012-66-7P 216012-67-8P 216012-68-9P 216012-69-0P  
 216012-70-3P 216012-71-4P 216012-72-5P 216012-73-6P 216012-74-7P  
 216012-75-8P 216012-76-9P 216012-77-0P 216012-78-1P 216012-79-2P  
 216012-80-5P 216012-81-6P 216012-83-8P 216012-84-9P 216012-85-0P

216012-86-1P . 216012-88-3P . 216012-89-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of tricyclic pyridone analogs as GABA-A receptor ligands)

IT 3099-31-8, 3-Picolyl chloride 3433-80-5, 2-Bromobenzyl bromide  
 5720-07-0, 4-Methoxyphenylboronic acid 42783-78-8, Benzyloxyacetaldehyde diethyl acetal 173739-73-6 197007-87-7 216012-95-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of tricyclic pyridone analogs as GABA-A receptor ligands)

IT 143462-35-5P 216011-87-9P 216012-90-7P 216012-91-8P  
 216012-92-9P 216012-93-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of tricyclic pyridone analogs as GABA-A receptor ligands)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

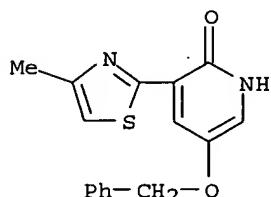
- (1) F Hoffmann-La Roche Ag; EP 0472166 A 1992 HCPLUS
- (2) F Hoffmann-La Roche & Co; EP 0183994 A 1986 HCPLUS
- (3) F Hoffmann-La Roche & Co; EP 0226196 A 1987 HCPLUS
- (4) F Hoffmann-La Roche & Co; EP 0294599 A 1988 HCPLUS

IT 216011-87-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of tricyclic pyridone analogs as GABA-A receptor ligands)

RN 216011-87-9 HCPLUS

CN 2(1H)-Pyrnidinone, 3-(4-methyl-2-thiazolyl)-5-(phenylmethoxy)- (9CI) (CA INDEX NAME)



L53 ANSWER 8 OF 11 HCPLUS COPYRIGHT 2005 ACS on STN

AN 1998:408485 HCPLUS

DN 129:175935

ED Entered STN: 04 Jul 1998

TI Synthesis of a fragment A derivative of an antibiotic, nosiheptide

AU Umemura, Kazuyuki; Noda, Hirofumi; Yoshimura, Juji; Konn, Akihito; Yonezawa, Yasuchika; Shin, Chung-gi

CS College of Science and Engineering, Iwaki Meisei University, Iwaki, 970-8551, Japan

SO Bulletin of the Chemical Society of Japan (1998), 71(6), 1391-1396

CODEN: BCSJA8; ISSN: 0009-2673

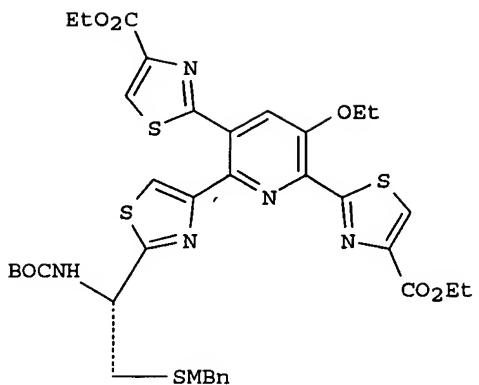
PB Chemical Society of Japan

DT Journal

LA English

CC 34-2 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 28

GI



AB Two 4-ethoxycarbonyl thiazolyl groups were introduced into 2- and 5-positions of 3-hydroxypyridine in 8 steps using 5-cyano-3-hydroxypyridine as the starting material. The pyridine derivative obtained in the last step was converted to a fragment A derivative (I) by stepwise introduction of the 2-substituted 4-thiazolyl group into the 6-position. The total yield for the formation of I via 14 steps was 7.6%.

ST nosiheptide fragment A prep

IT 56377-79-8DP, Nosiheptide, fragment A

RL: PNU (Preparation, unclassified); PREP (Preparation)  
(synthesis of antibiotic nosiheptide fragment A)

IT 195155-58-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(synthesis of antibiotic nosiheptide fragment A)

IT 70-23-5, Ethyl bromopyruvate 7486-35-3, Tributylvinylstannane  
18942-46-6 74115-13-2 97674-02-7, Tributyl(1-ethoxyvinyl)stannane  
RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis of antibiotic nosiheptide fragment A)

IT 66960-27-8P 152803-24-2P 191166-28-6P 191166-32-2P 191166-34-4P  
191166-37-7P 191166-41-3P 191166-45-7P 191166-50-4P  
191166-52-6P 191166-58-2P 211371-96-9P 211372-01-9P 211372-06-4P

211372-09-7P 211372-10-0P 211372-11-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(synthesis of antibiotic nosiheptide fragment A)

IT 191166-62-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(synthesis of antibiotic nosiheptide fragment A)

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Benazet, F; Experientia 1980, V36, P414 HCAPLUS
- (2) Clauson-Kass, N; GB 2025953 1980 HCAPLUS
- (3) Depaire, H; Tetrahedron Lett 1964, V1977, P1395
- (4) Echavarren, A; J Am Chem Soc 1987, V109, P5479
- (5) Fife, W; J Org Chem 1983, V48, P1375 HCAPLUS
- (6) Grashey, R; Comput Org Synth 1991, V6, P225
- (7) Karen, K; Synlett 1996, V1994, P759
- (8) Kelly, R; J Org Chem 1986, V51, P4590 HCAPLUS
- (9) Kelly, T; J Org Chem 1996, V61, P4623 HCAPLUS
- (10) Kelly, T; Tetrahedron Lett 1991, V32, P4263 HCAPLUS
- (11) Kelly, T; Tetrahedron Lett 1995, V36, P5319 HCAPLUS
- (12) Koerber-Ple, K; J Heterocycl Chem 1995, V32, P1309 HCAPLUS
- (13) Nakamura, Y; Chem Lett V1992, P1005
- (14) Nishimura, O; Chem Pharm Bull 1978, V26, P1576 HCAPLUS
- (15) Okumura, K; Chem Lett 1991, V1996, P1025
- (16) Pascard, C; J Am Chem Soc 1977, V109, P6418
- (17) Pendrale, I; J Org Chem 1995, V60, P3249
- (18) Prange, T; Nature 1977, V265, P189 HCAPLUS

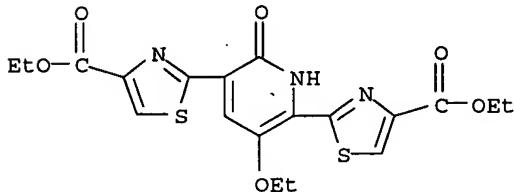
(19) Rhone-Poulenc, S; FR 1392453 1961  
 (20) Rhone-Poulenc, S; US 3155581 1964  
 (21) Sakamoto, T; Chem Pharn Bull 1986, V33, P565  
 (22) Schwarz, G; Org Synth 1955, VIII, P332  
 (23) Shin, C; Bull Chem Soc Jpn 1995, V68, P3151 HCAPLUS  
 (24) Shin, C; J Heterocycles 1996, V43, P891 HCAPLUS  
 (25) Umemura, K; Synthesis V1995, P1423  
 (26) Umemura, K; Tetrahedron Lett 1997, V38, P3539 HCAPLUS  
 (27) Vorbruggen, H; Synthesis V1983, P316  
 (28) Yokoyama, Y; Anal Sci 1997, V13, P703 HCAPLUS

IT 191166-45-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis of antibiotic nosiheptide fragment A)

RN 191166-45-7 HCAPLUS

CN 4-Thiazolecarboxylic acid, 2,2'-(3-ethoxy-1,6-dihydro-6-oxo-2,5-pyridinediyl)bis-, diethyl ester (9CI) (CA INDEX NAME)



L53 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:349332 HCAPLUS

DN 127:50961

ED Entered STN: 04 Jun 1997

TI The synthesis of fragment A of an antibiotic, Nosiheptide

AU Umemura, Kazuyuki; Noda, Hirofumi; Yoshimura, Juji; Konn, Akihito; Yonezawa, Yasuchika; Shin, Chung-Gi

CS College of Science and Engineering, Iwaki Meisei University, Iwaki, 970, Japan

SO Tetrahedron Letters (1997), 38(20), 3539-3542

CODEN: TELEAY; ISSN: 0040-4039

PB Elsevier

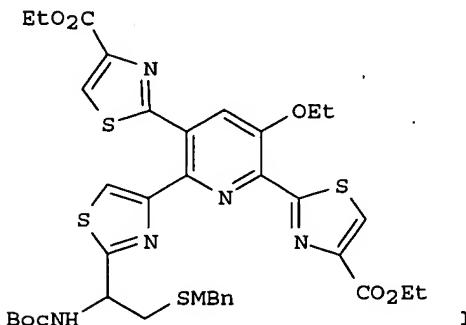
DT Journal

LA English

CC 34-2 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 28

GI



AB Useful for the total synthesis of Nosiheptide, its fragment A derivative I

(MBn = p-methoxybenzyl) was obtained by the stepwise introduction of 2,5-bis[(4-ethoxycarbonyl)-2-thiazolyl] groups and 6-[(2-substituted)-4-thiazolyl] group into 3-hydroxy-5-cyanopyridine. The total yield of I was 7.6% via 14 steps.

ST antibiotic nosiheptide fragment A synthesis; thiazolyl ring introduction hydroxycyanopyridine starting material

IT Antibiotics

(synthesis of fragment A of the antibiotic nosiheptide)

IT 74115-13-2 191166-58-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis of fragment A of the antibiotic nosiheptide)

IT 152803-24-2P 191166-28-6P 191166-32-2P 191166-34-4P 191166-37-7P  
191166-41-3P 191166-45-7P 191166-50-4P 191166-52-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of fragment A of the antibiotic nosiheptide)

IT 56377-79-8DP, Nosiheptide, fragments 191166-62-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of fragment A of the antibiotic nosiheptide)

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Bredenkamp, M; Synth Commun 1990, V20, P2235 HCPLUS
- (2) Clauson-Kass, N; GB 2025953 1980 HCPLUS
- (3) Depaire, H; Tetrahedron Lett 1977, P1395 HCPLUS
- (4) Kelly, R; J Org Chem 1986, V51, P4590 HCPLUS
- (5) Kelly, T; Tetrahedron Lett 1991, V32, P4263 HCPLUS
- (6) Kelly, T; Tetrahedron Lett 1995, V36, P5319 HCPLUS
- (7) Koerber-Ple, K; J Heterocyclic Chem 1995, V32, P1309 HCPLUS
- (8) Nakamura, Y; Chem Lett 1992, P1005 HCPLUS
- (9) Okumura, K; Chem Lett 1996, P1025 HCPLUS
- (10) Pendark, I; J Org Chem 1995, V60, P3249
- (11) Pinnret, S; FR 1392453 1961
- (12) Pinnret, S; US 3155581 1964
- (13) Prange, T; J Am Chem Soc 1977, V109, P6418
- (14) Prange, T; Nature 1977, V265, P189 HCPLUS
- (15) Shin, C; Bull Chem Soc, Jpn 1995, V68, P3151 HCPLUS
- (16) Shin, C; J Heterocycles 1996, V43, P891 HCPLUS
- (17) Umemura, K; Synthesis 1995, P1423 HCPLUS

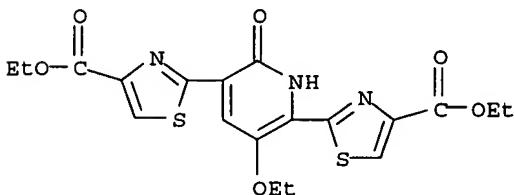
IT 191166-45-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of fragment A of the antibiotic nosiheptide)

RN 191166-45-7 HCPLUS

CN 4-Thiazolecarboxylic acid, 2,2'-(3-ethoxy-1,6-dihydro-6-oxo-2,5-pyridinediyl)bis-, diethyl ester (9CI) (CA INDEX NAME)



L53 ANSWER 10 OF 11 HCPLUS COPYRIGHT 2005 ACS on STN

AN 1991:656617 HCPLUS

DN 115:256617

ED Entered STN: 14 Dec 1991

TI Synthesis of micrococcinic acid

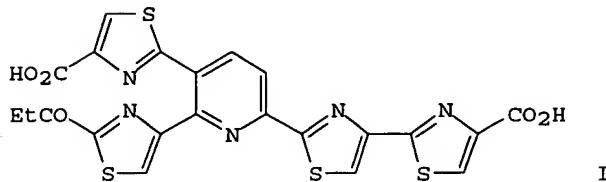
AU Kelly, T. Ross; Jagoe, Christopher T.; Gu, Zhengxiang

CS Dep. Chem., Boston Coll., Chestnut Hill, MA, 02167, USA

SO Tetrahedron Letters (1991), 32(34), 4263-6

CODEN: TELEAY; ISSN: 0040-4039

DT Journal  
 LA English  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 OS CASREACT 115:256617  
 GI



AB The first synthesis of micrococcinic acid (I) is described. The 5 rings of I are assembled from monocyclic precursors using 4 palladium-catalyzed biaryl coupling reactions.

ST micrococcinic acid; palladium catalyst biaryl coupling

IT 5154-00-7, 6-Amino-2-pyridone  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (bromination and butoxycarbonylation of)

IT 2295-31-0, 2,4-Thiazolidinedione  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (bromination of, with phosphorus oxybromide)

IT 123-38-6, Propanal, reactions 1609-86-5, tert-Butyl isocyanate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (condensation of, with lithiothiazole derivative)

IT 137310-13-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and acidic hydrolysis of)

IT 137310-06-6P 137310-08-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and bromination of)

IT 137310-05-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and coupling of, with (dithiazolyl)pyridine derivative, palladium-catalyzed)

IT 135298-43-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and coupling of, with pyridine derivative, palladium-catalyzed)

IT 137310-03-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and coupling of, with stannylpypyridine derivative, palladium-catalyzed)

IT 108306-54-3P, 4-Trimethylstannyl-2-trimethylsilylthiazole 137337-79-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and coupling of, with thiazole derivative, palladium-catalyzed)

IT 137310-11-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and diazotization-hydroxylation of)

IT 137310-10-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and selective deamidation of)

IT 137310-04-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and stannylation of, with hexamethylditin, palladium-catalyzed)

IT 137310-12-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and trifluoroacetylation of)

IT 137310-01-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and O-ethylation of)

IT 7171-36-0P, Micrococcinic acid  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

IT 137337-78-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation, attempted stannylation, and coupling of, with thiazolylpyridine derivative, palladium-catalyzed)

IT 137310-09-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation, attempted stannylation, and coupling of, with thiazolylthiazole derivative, palladium-catalyzed)

IT 137310-07-7P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation, deethylation, and bromination of)

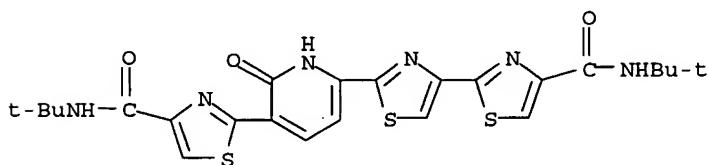
IT 108306-53-2P, 4-Bromo-2-trimethylsilylthiazole  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation, lithiation, and condensation of, with Bu isocyanate or chlorotrimethylsilane)

IT 4175-77-3P, 2,4-Dibromothiazole  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation, lithiation, and condensation of, with propanal)

IT 137310-02-2P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation, lithiation, and stannylation of)

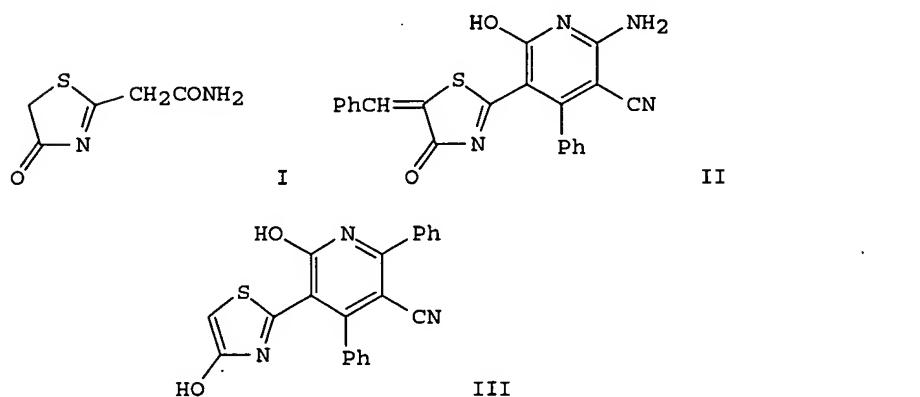
IT 137310-12-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and trifluoroacetylation of)

RN 137310-12-4 HCPLUS  
CN [2,4'-Bithiazole]-4-carboxamide, N-(1,1-dimethylethyl)-2'-[5-[4-[(1,1-dimethylethyl)amino]carbonyl]-2-thiazolyl]-1,6-dihydro-6-oxo-2-pyridinyl]- (9CI) (CA INDEX NAME)



LS3 ANSWER 11 OF 11 HCPLUS COPYRIGHT 2005 ACS on STN  
AN 1983:612442 HCPLUS  
DN 99:212442  
ED Entered STN: 12 May 1984  
TI Activated nitriles in heterocyclic synthesis: synthesis and reactivity of

AU 4-oxo-4,5-dihydro-1,3-thiazol-2-acetamide  
 Sadek, Kamal Usef; Mourad, Aboul Fetouh E.; Abd-Elhafeez, Ala Eldin;  
 Elnagdi, Mohamed Hilmy  
 CS Fac. Sci., Minia Univ., Minia, Egypt  
 SO Synthesis (1983), (9), 739-41  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DT Journal  
 LA English  
 CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 27  
 OS CASREACT 99:212442  
 GI



AB The title amide (I) was converted to thiazolylnicotinonitrile derivative II by 2 routes. Refluxing I with PhCH:C(CN)2 in pyridine gave II; condensing I with PhCHO and then treating with CH2(CN)2 similarly gave II. Heating I with PhCH:C(COPh)CH in pyridine gave pyridine derivative III.

ST thiazoleacetamide cycloaddn benzylidenemalononitrile; cyclocondensation cycloaddn cinnamate thiazoleacetamide; nicotinonitrile thiazolylnicotinonitrile

IT Cyclocondensation reaction  
 (cycloaddn. and, of thiazoleacetamide with  $\alpha$ -acylcinnamonnitriles)

IT Cycloaddition reaction  
 (cyclocondensation and, of thiazoleacetamide derivative with  $\alpha$ -acylcinnamonnitriles)

IT Tautomerism and Tautomers  
 (of oxothiazoleacetamide)

IT 100-52-7, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (condensation of with thiazoleacetamide derivative)

IT 109-77-3 2700-22-3  
 RL: PROC (Process)  
 (cycloaddn. of, with thiazoleacetamide derivative)

IT 68-11-1, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cycloaddn.-cyclocondensation of, with cyanoacetamide)

IT 107-91-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cycloaddn.-cyclocondensation of, with mercaptoacetic acid)

IT 105-56-6 2025-40-3 20413-05-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cycloaddn.-cyclocondensation of, with thiazoleacetamide derivative)

IT 87947-98-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and cycloaddn. and cyclocondensation reactions of, with malononitrile and cyanoacetate ester)

IT 87947-93-1P 87947-94-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and cycloaddn.-cyclocondensation of, with  $\alpha$ -acylcinnamonnitriles)

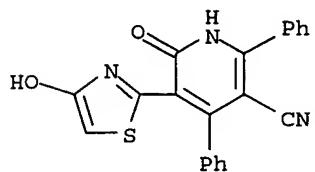
IT 27653-83-4P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and tautomerism of)

IT 87947-95-3P 87947-96-4P 87947-97-5P 87947-99-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

IT 87947-97-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 87947-97-5 HCPLUS

CN 3-Pyridinecarbonitrile, 1,6-dihydro-5-(4-hydroxy-2-thiazolyl)-6-oxo-2,4-diphenyl- (9CI) (CA INDEX NAME)



=> b uspatall  
 FILE 'USPATFULL' ENTERED AT 16:17:42 ON 18 JUL 2005  
 CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 16:17:42 ON 18 JUL 2005  
 CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs fhitstr 158 tot

L58 ANSWER 1 OF 2 USPATFULL on STN  
 AN 2004:294735 USPATFULL  
 TI Compounds and methods of uses  
 IN Norman, Mark H., Thousand Oaks, CA, United States  
 Wang, Hui-Ling, Thousand Oaks, CA, United States  
 Rzasa, Robert, Ventura, CA, United States  
 Zhong, Wenge, Thousand Oaks, CA, United States  
 Nguyen, Thomas, Thousand Oaks, CA, United States  
 Kaller, Matthew, Ventura, CA, United States  
 Liu, Hu, Brooklyn, NY, United States  
 PA Amgen, Inc., Thousand Oaks, CA, United States (U.S. corporation).  
 PI US 6822097 B1 20041123  
 AI US 2003-360226 20030206 (10)  
 PRAI US 2002-355313P 20020207 (60)  
 DT Utility  
 FS GRANTED  
 EXNAM Primary Examiner: Seaman, D. Margaret  
 CLMN Number of Claims: 44  
 ECL Exemplary Claim: 1  
 DRWN 0 Drawing Figure(s); 0 Drawing Page(s)  
 LN.CNT 15475  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Selected compounds are effective for treatment of diseases, such as cell proliferation or apoptosis mediated diseases. The invention encompasses novel compounds, analogs, prodrugs and pharmaceutically acceptable derivatives thereof, pharmaceutical compositions and methods for prophylaxis and treatment of diseases and other maladies or conditions

involving stroke, cancer and the like. The subject invention also relates to processes for making such compounds as well as to intermediates useful in such processes.

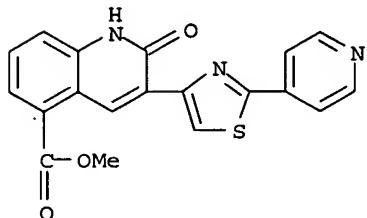
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 578017-64-8P

(preparation of thiazolyl substituted quinolinones for treating cell proliferative disorders, neurol. disorders and apoptosis)

RN 578017-64-8 USPATFULL

CN 5-Quinolincarboxylic acid, 1,2-dihydro-2-oxo-3-[2-(4-pyridinyl)-4-thiazolyl]-, methyl ester (9CI) (CA INDEX NAME)



LS8 ANSWER 2 OF 2 USPATFULL on STN

AN 2004:190788 USPATFULL

TI Pyrid-2-one derivatives and methods of use

IN Zhong, Wenge, Thousand Oaks, CA, UNITED STATES

Norman, Mark Henry, Thousand Oaks, CA, UNITED STATES

Kaller, Matthew, Ventura, CA, UNITED STATES

Nguyen, Thomas, Thousand Oaks, CA, UNITED STATES

Rzasa, Robert Michael, Ventura, CA, UNITED STATES

Tegley, Christopher, Thousand Oaks, CA, UNITED STATES

Wang, Hui-Ling, Thousand Oaks, CA, UNITED STATES

PI US 2004147561 A1 20040729

AI US 2003-736289 A1 20031212 (10)

PRAI US 2002-436787P 20021227 (60)

DT Utility

FS APPLICATION

LREP AMGEN INC., U.S. Patent Operations/JWB, Dept. 4300, M/S 27-4-A, One Amgen Center Drive, Thousand Oaks, CA, 91320-1799

CLMN Number of Claims: 39

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 7376

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Selected compounds are effective for treatment of diseases, such as cell proliferation or apoptosis mediated diseases. The invention encompasses novel compounds, analogs, prodrugs and pharmaceutically acceptable derivatives thereof, pharmaceutical compositions and methods for prophylaxis and treatment of diseases and other maladies or conditions involving stroke, cancer and the like. The subject invention also relates to processes for making such compounds as well as to intermediates useful in such processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

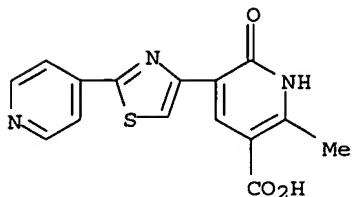
IT 727383-80-4P, 2-Methyl-6-oxo-5-[2-(pyridin-4-yl)-1,3-thiazol-4-yl]-1,6-dihydropyridine-3-carboxylic acid trifluoroacetate  
(Cdk2/Cdk5 inhibitor; preparation of quinazolines as Cdk2 and Cdk5 kinase inhibitors for treatment of cell proliferation-related disorders)

RN 727383-80-4 USPATFULL

CN 3-Pyridinecarboxylic acid, 1,6-dihydro-2-methyl-6-oxo-5-[2-(4-pyridinyl)-4-thiazolyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

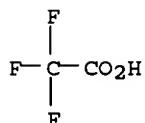
CM 1

CRN 727383-79-1  
 CMF C15 H11 N3 O3 S



CM 2

CRN 76-05-1  
 CMF C2 H F3 O2



=> d bib abs hitstr 161 tot

L61 ANSWER 1 OF 4 USPATFULL on STN  
 AN 2002:33452 USPATFULL  
 TI Superoxide radical inhibitor  
 IN Chihiro, Masatoshi, Naruto, JAPAN  
     Komatsu, Hajime, Tokyo, JAPAN  
     Tominaga, Michiaki, Itano-Gun, JAPAN  
     Yabuuchi, Yoichi, Tokushima, JAPAN  
 PA Otsuka Pharmaceutical Co., Ltd., Tokyo, JAPAN (non-U.S. corporation)  
 PI US 37556 E1 20020219 <--  
     US 5643932 19970701 (Original)  
 AI US 1999-245914 19990208 (9) <--  
     US 1995-444728 19950519 (Original) <--  
 RLI Continuation of Ser. No. US 916082, now abandoned  
 PRAI JP 1990-337727 19901130 <--  
 DT Reissue  
 FS GRANTED  
 EXNAM Primary Examiner: Gerstl, Robert  
 LREP Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.  
 CLMN Number of Claims: 7  
 ECL Exemplary Claim: 1  
 DRWN 0 Drawing Figure(s); 0 Drawing Page(s)  
 LN.CNT 6449  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB A superoxide radical inhibitor containing, as an effective ingredient,  
     an azole derivative represented by the general formula (1), ##STR1##

[wherein R.<sup>1</sup> represents a phenyl group which may have 1-3 lower alkoxy groups as substituent(s) on the phenyl ring, a phenyl group having a lower alkyleneoxy group, or the like; R.<sup>2</sup> represents a hydrogen atom, a phenyl group, a halogen atom, a lower alkoxy carbonyl group, a lower alkyl group, an amino-lower alkyl group which may have a lower alkyl group as a substituent, a dihydrocarbostyril group, or the like; R.<sup>3</sup> represents a group of the formula, ##STR2##]

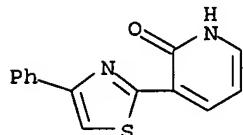
(R.sup.4B represents a hydroxyl group, a carboxy group, a lower alkenyl group or a lower alkyl group, m represents 0, 1 or 2); X represents a sulfur atom or an oxygen atom] or a salt thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 145737-03-7P 145738-49-4P 145738-51-8P  
(preparation of, as active oxygen inhibitor)

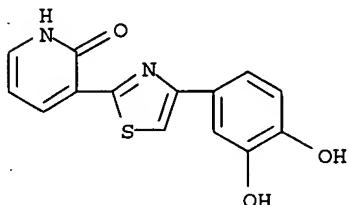
RN 145737-03-7 USPATFULL

CN 2(1H)-Pyridinone, 3-(4-phenyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



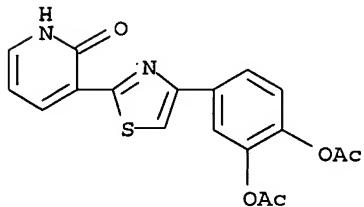
RN 145738-49-4 USPATFULL

CN 2(1H)-Pyridinone, 3-[4-(3,4-dihydroxyphenyl)-2-thiazolyl]- (9CI) (CA INDEX NAME)



RN 145738-51-8 USPATFULL

CN 2(1H)-Pyridinone, 3-[4-[3,4-bis(acetoxy)phenyl]-2-thiazolyl]- (9CI) (CA INDEX NAME)



L61 ANSWER 2 OF 4 USPATFULL on STN

AN 2000:80772 USPATFULL

TI Superoxide radical inhibitor

IN Chihiro, Masatoshi, Naruto, Japan  
Komatsu, Hajime, Tokushima, Japan  
Tominaga, Michiaki, Tokushima, Japan  
Yabuuchi, Yoichi, Tokushima, Japan

PA Otsuka Pharmaceutical Co., Ltd., Tokyo, Japan (non-U.S. corporation)

PI US 6080764 20000627 <--

AI US 1997-826343 19970325 (8) <--

RLI Division of Ser. No. US 1995-482657, filed on 7 Jun 1995 which is a division of Ser. No. US 1995-444728, filed on 19 May 1995 which is a continuation of Ser. No. US 916082

PRAI JP 1990-3377727 19901130 <--

DT Utility

FS Granted  
 EXNAM Primary Examiner: Gerstl, Robert  
 LREP Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.  
 CLMN Number of Claims: 10  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 7154

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

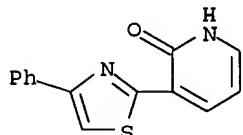
AB A superoxide radical inhibitor containing, as an effective ingredient, an azole derivative represented by the general formula (1), ##STR1## [wherein R.<sup>1</sup> represents a phenyl group which may have 1-3 lower alkoxy groups as substituent(s) on the phenyl ring, a phenyl group having a lower alkylenedioxy group, or the like; R.<sup>2</sup> represents a hydrogen atom, a phenyl group, a halogen atom, a lower alkoxy carbonyl group, a lower alkyl group, an amino-lower alkyl group which may have a lower alkyl group as a substituent, a dihydrocarbostyryl group, or the like; R.<sup>3</sup> represents a group of the formula, ##STR2## (R.<sup>4</sup>B represents a hydroxyl group, a carboxy group, a lower alkenyl group or a lower alkyl group. m represents 0, 1 or 2); X represents a sulfur atom or an oxygen atom] or a salt thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 145737-03-7P 145738-49-4P 145738-51-8P  
 (preparation of, as active oxygen inhibitor)

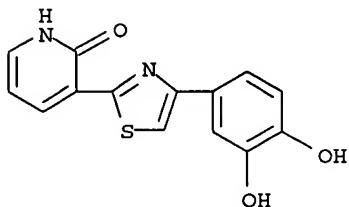
RN 145737-03-7 USPATFULL

CN 2(1H)-Pyridinone, 3-[4-(4-phenyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



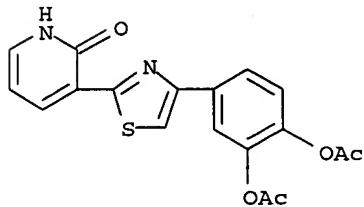
RN 145738-49-4 USPATFULL

CN 2(1H)-Pyridinone, 3-[4-[4-(3,4-dihydroxyphenyl)-2-thiazolyl]- (9CI) (CA INDEX NAME)



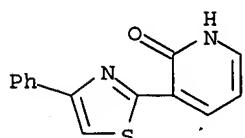
RN 145738-51-8 USPATFULL

CN 2(1H)-Pyridinone, 3-[4-[3,4-bis(acetyloxy)phenyl]-2-thiazolyl]- (9CI) (CA INDEX NAME)

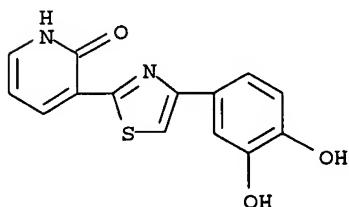


L61 ANSWER 3 OF 4 USPATFULL on STN  
 AN 97:94251 USPATFULL  
 TI Superoxide radical inhibitor  
 IN Chihiro, Masatoshi, Naruto, Japan  
     Komatsu, Hajime, Itano-gun, Japan  
     Tominaga, Michiaki, Itano-gun, Japan  
     Yabuuchi, Yoichi, Tokushima, Japan  
 PA Otsuka Pharmaceutical Co., Ltd., Tokyo, Japan (non-U.S. corporation)  
 PI US 5677319                                 19971014                             <--  
 AI US 1995-482657                             19950607 (8)                             <--  
 RLI Division of Ser. No. US 1995-444728, filed on 19 May 1995 which is a  
     continuation of Ser. No. US 1992-916082, filed on 29 Jul 1992, now  
     abandoned  
 PRAI JP 1990-337727                             19901130                             <--  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Gerstl, Robert  
 LREP Finnegan, Henderson, Farabow, Garrett & Dunner  
 CLMN Number of Claims: 22  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 6751  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB A superoxide radical inhibitor containing, as an effective ingredient,  
     an azole derivative represented by the general formula (1), ##STR1##  
     [wherein R.sup.1 represents a phenyl group which may have 1-3 lower  
     alkoxy groups as substituent(s) on the phenyl ring, a phenyl group  
     having a lower alkyleneoxy group, or the like; R.sup.2 represents a  
     hydrogen atom, a phenyl group, a halogen atom, a lower alkoxy carbonyl  
     group, a lower alkyl group, an amino-lower alkyl group which may have a  
     lower alkyl group as a substituent, a dihydrocarbostyryl group, or the  
     like; R.sup.3 represents a group of the formula, ##STR2## (R.sup.4B  
     represents a hydroxyl group, a carboxy group, a lower alkenyl group or a  
     lower alkyl group. m represents 0, 1 or 2); X represents a sulfur atom  
     or an oxygen atom] or a salt thereof.

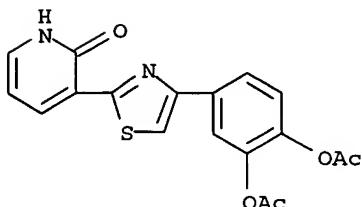
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 IT 145737-03-7P 145738-49-4P 145738-51-8P  
     (preparation of, as active oxygen inhibitor)  
 RN 145737-03-7 USPATFULL  
 CN 2(1H)-Pyridinone, 3-(4-phenyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



RN 145738-49-4 USPATFULL  
 CN 2(1H)-Pyridinone, 3-[4-(3,4-dihydroxyphenyl)-2-thiazolyl]- (9CI) (CA  
     INDEX NAME)



RN 145738-51-8 USPATFULL  
 CN 2(1H)-Pyridinone, 3-[4-[3,4-bis(acetyloxy)phenyl]-2-thiazolyl]- (9CI) (CA INDEX NAME)



L61 ANSWER 4 OF 4 USPATFULL on STN  
 AN 97:56698 USPATFULL  
 TI Superoxide radical inhibitor  
 IN Chihiro, Masatoshi, Naruto, Japan  
 Komatsu, Hajime, Itano-gun, Japan  
 Tominaga, Michiaki, Itano-gun, Japan  
 Yabuuchi, Yoichi, Tokushima, Japan  
 PA Otsuka Pharmaceutical Co., Ltd., Tokyo, Japan (non-U.S. corporation)  
 PI US 5643932 19970701 <--  
 AI US 1995-444728 19950519 (8) <--  
 RLI Continuation of Ser. No. US 1992-916082, filed on 29 Jul 1992, now abandoned  
 PRAI JP 1990-337727 19901130 <--  
 DT Utility  
 FS Granted

EXNAM Primary Examiner: Gerstl, Robert  
 LREP Finnegan, Henderson, Farabow, Garrett & Dunner  
 CLMN Number of Claims: 11  
 ECL Exemplary Claim: 9  
 DRWN No Drawings  
 LN.CNT 6708

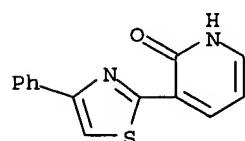
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A superoxide radical inhibitor containing, as an effective ingredient, an azole derivative represented by the general formula (1), ##STR1## [wherein R.<sup>1</sup> represents a phenyl group which may have 1-3 lower alkoxy groups as substituent(s) on the phenyl ring, a phenyl group having a lower alkyleneoxy group, or the like; R.<sup>2</sup> represents a hydrogen atom, a phenyl group, a halogen atom, a lower alkoxy carbonyl group, a lower alkyl group, an amino-lower alkyl group which may have a lower alkyl group as a substituent, a dihydrocarbostyryl group; or the like; R.<sup>3</sup> represents a group of the formula, ##STR2## (R.<sup>4</sup>B represents a hydroxyl group, a carboxy group, a lower alkenyl group or a lower alkyl group. m represents 0, 1 or 2); X represents a sulfur atom or an oxygen atom] or a salt thereof.

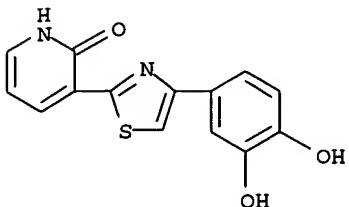
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 145737-03-7P 145738-49-4P 145738-51-8P  
 (preparation of, as active oxygen inhibitor)

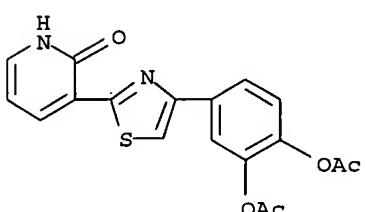
RN 145737-03-7 USPATFULL  
 CN 2(1H)-Pyridinone, 3-(4-phenyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



RN 145738-49-4 USPATFULL  
 CN 2(1H)-Pyridinone, 3-[4-(3,4-dihydroxyphenyl)-2-thiazolyl]- (9CI) (CA  
 INDEX NAME)



RN 145738-51-8 USPATFULL  
 CN 2(1H)-Pyridinone, 3-[4-[3,4-bis(acetyloxy)phenyl]-2-thiazolyl]- (9CI) (CA  
 INDEX NAME)



=> b hcao  
 FILE 'HCAOLD' ENTERED AT 16:18:32 ON 18 JUL 2005  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

PRE-1967 CHEMICAL ABSTRACTS FILE WITH HOUR-BASED PRICING  
 FILE COVERS 1907-1966  
 FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> d all 162 tot

L62 ANSWER 1 OF 1 HCAOLD COPYRIGHT 2005 ACS on STN  
 AN CA59:635b CAOLD  
 TI 2-amino-4-[2-(5-nitrofuryl)]thiazoles  
 AU Landquist, Justus K.  
 PA Imperial Chemical Industries Ltd.  
 DT Patent  
 PATENT NO. KIND DATE  
 ----- ----- -----

PI US 3074954 1963  
 GB 967492  
 IT 2731-45-5 2731-48-8 38514-71-5 90349-60-3 91371-22-1 91983-02-7  
 91983-62-9 92017-53-3 92555-11-8 93717-99-8 95194-95-9  
 96535-15-8 96954-30-2 97031-88-4 97439-28-6 100258-61-5 105863-16-9

=> b reg  
 FILE 'REGISTRY' ENTERED AT 16:18:39 ON 18 JUL 2005  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
 provided by InfoChem.

STRUCTURE FILE UPDATES: 17 JUL 2005 HIGHEST RN 855596-49-5  
 DICTIONARY FILE UPDATES: 17 JUL 2005 HIGHEST RN 855596-49-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

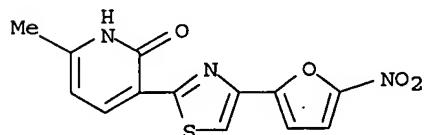
\*\*\*\*\*  
 \*  
 \* The CA roles and document type information have been removed from \*  
 \* the IDE default display format and the ED field has been added, \*  
 \* effective March 20, 2005. A new display format, IDERL, is now \*  
 \* available and contains the CA role and document type information. \*  
 \*  
 \*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS  
 for details.

Experimental and calculated property data are now available. For more  
 information enter HELP PROP at an arrow prompt in the file or refer  
 to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d ide 163 tot

L63 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 92017-53-3 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 2-Pyridinol, 6-methyl-3-[4-(5-nitro-2-furyl)-2-thiazolyl]- (7CI) (CA  
 INDEX NAME)  
 FS 3D CONCORD  
 MF C13 H9 N3 O4 S  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS  
 (\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> b home  
FILE 'HOME' ENTERED AT 16:18:47 ON 18 JUL 2005

=>

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> b home  
 FILE 'HOME' ENTERED AT 16:18:47 ON 18 JUL 2005

=> => b uspatall  
 FILE 'USPATFULL' ENTERED AT 16:31:29 ON 18 JUL 2005  
 CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 16:31:29 ON 18 JUL 2005  
 CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs hitstr 155 tot

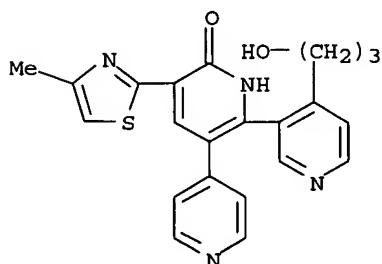
L55 ANSWER 1 OF 2 USPATFULL on STN  
 AN 2001:233547 USPATFULL  
 TI Tricyclic pyridin-2-one analogue as a GABA receptor ligand  
 IN Crawforth, James Michael, Stevenage, Great Britain  
     Gibson, Karl Richard, Bishops Stortford, Great Britain  
     Rowley, Michael, Casalpolocco, Italy  
 PI US 2001053776 A1 20011220  
 AI US 2001-861318 A1 20010518 (9)  
 PRAI GB 2000-12708 20000524  
     GB 2001-3525 20010213  
 DT Utility  
 FS APPLICATION  
 LREP MERCK AND CO INC, P O BOX 2000, RAHWAY, NJ, 070650907  
 CLMN Number of Claims: 8  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 684

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB 9-(4-Methylthiazol-2-yl)- 11-(pyridin-4-yl)-6,7-dihydro-5H-2,  
 7a-diazadibenzo[a,c]cyclohepten-8-one, and pharmaceutically acceptable  
 salts thereof, are selective ligands for GABAA receptors, in particular  
 having high affinity for the a2 and/or a3 subunit thereof, and are  
 accordingly of benefit in the treatment and/or prevention of disorders  
 of the central nervous system, including anxiety and convulsions.

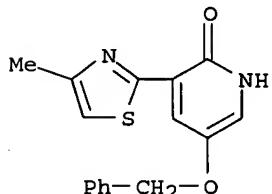
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 380830-49-9P  
     (preparation of tricyclic pyridin-2-one analog as a GABA receptor ligand)  
 RN 380830-49-9 USPATFULL  
 CN [3,2':3',4''-Terpyridin]-6'(1'H)-one, 4-(3-hydroxypropyl)-5'- (4-methyl-2-  
     thiazolyl)- (9CI) (CA INDEX NAME)



L55 ANSWER 2 OF 2 USPATFULL on STN

AN 2000:138341 USPATFULL  
 TI Tricyclic pyridone analogues as GABA-A receptor ligands  
 IN Harrison, Timothy, Great Dunmow, United Kingdom  
     Lewis, Richard Thomas, Bishops Stortford, United Kingdom  
     Moyes, Christopher Richard, Sawbridgeworth, United Kingdom  
     Nadin, Alan, Cambridge, United Kingdom  
     Owens, Andrew Pate, Huntingdon, United Kingdom  
 PA Merck Sharp & Dohme Limited, Hoddesdon, United Kingdom (non-U.S.  
     corporation)  
 PI US 6133255                         20001017  
     WO 9850384 19981112  
 AI US 1999-381988                     19990927 (9)  
     WO 1998-GB1167                     19980422  
   19990927 PCT 371 date  
   19990927 PCT 102(e) date  
 PRAI GB 1997-8945                     19970501  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: Liu, Hong  
 LREP Lee, Shu M., Rose, David L.  
 CLMN Number of Claims: 7  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 1186  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Tricyclic pyridin-2-one analogues which are ligands for GABA sub.A receptors, are useful in the therapy of deleterious mental states, and are represented by the formula: ##STR1##  
  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 IT 216011-87-9P  
     (preparation of tricyclic pyridone analogs as GABA-A receptor ligands)  
 RN 216011-87-9 USPATFULL  
 CN 2(1H)-Pyridinone, 3-(4-methyl-2-thiazolyl)-5-(phenylmethoxy)- (9CI) (CA  
     INDEX NAME)



=> b home  
 FILE 'HOME' ENTERED AT 16:31:45 ON 18 JUL 2005

=>